DRAFT CLEAN WATER FACILITIES PLAN

Mascotte Public Services

210 South Florida Avenue | Suite 220
Lakeland, Florida 33801
800.426.4262

woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

0232301.03
City of Mascotte, FL
October 2021

CERTIFICATION BY ENGINEER

The information contained in this report is true and correct to the best of his knowledge, the report was prepared in accordance with sound engineering principles, and he discussed the recommendations, costs, and funding approach with the City of Mascotte (City) or the City's delegated representative. This Clean Water Facilities Plan was prepared to meet the requirements of the Florida Clean Water State Revolving Fund (CWSRF) Program under Chapter 62-503, F.A.C. and this certification pertains only to the planning analysis presented in this report. Certification for design and construction of the proposed facilities will be completed under a separate CWSRF project.

_____
Date

Justin deMello, P.E.
Florida P.E. License No. 85668
Woodard & Curran, Inc.
210 S. Florida Ave, Suite 220
Lakeland, FL 33801
863.354.4416

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

SUMMARY OF FINDINGS AND RECOMMENDATIONS

This Facilities Plan was prepared by Woodard & Curran, Inc. (Woodard & Curran) to meet the requirements of the Florida Drinking Water State Revolving Fund (SRF) program. The City developed this Clean Water Facilities Plan to evaluate utility needs to support growth, improve resiliency and replace aging infrastructure. The Facilities Plan is a planning-level document that defines project needs and costs to allow the City to secure grant and low-interest funds for the design and construction of utilities.

The Facilities Plan is intended to represent the City's needs for a 20-year planning period beginning in the year 2021 and through the year 2041. The planning area includes the City of Mascotte and contiguous lands located in Lake County as shown in Figure ES-1. The recommendations resulting from this study are consistent with both the City's and the County's Local Comprehensive Plans.

The clean water (wastewater) collection and treatment system consists of approximately 10,300 linear feet (LF) of force main associated with two existing lift stations which serve three commercial businesses and a small housing development. Additionally, an inactive, dry gravity collection system is in place that serves approximately 550 homes, none of which are connected to the system. An Interlocal Agreement is in place with the City of Groveland to accept and treat up to 250,000 gpd of the City's wastewater though the current usage is approximately 1,400 gpd.

The population projection for the 2021-2041 planning period in five-year increments, were evaluated based on population projections from the University of Florida Shimberg Center for Affordable Housing, Bureau of Economic and Business Research (BEBR), and the U.S. Census ACS. Since population projection BEBR data is only available at the county level, the projected population was based on future developments. More specifically, when completing the population projection, the City analyzed all developments with approved and pending Developer Agreements, as well as those with Developer Agreements in progress. The Mascotte wastewater service area was evaluated to see how the Comprehensive Plan projected growth would impact wastewater flows and how the City should proceed with collection and treatment in the future.

Due to the projected growth that the City will undergo over the next 20 years, flows to the interconnection are anticipated to exceed capacity within the planning period. Based on the life cycle analysis, it is most economical and advantageous for the City to continue to send flows to the City of Groveland for regional treatment via an Interlocal Agreement than to build and operate their own wastewater treatment plant. This will require an amendment to the existing Interlocal Agreement, which should include a revision to increase the total quantity of accepted flows to at least 1.37 MGD to meet the projected wastewater flows and will likely come with an adjusted fee for treatment and disposal. The proposed improvements to the Mascotte collection system are shown in Figure ES-2 . This includes eight new lift stations, retrofitting the existing Groveland Lift Station and installing associated force mains to convey flows to the City of Groveland.

Additionally, since the City will be contributing flows to the Groveland's proposed WWTP and thereby expanding its capacity demand, it is expected that the City will commit to paying a percentage of the construction cost of the plant. It is assumed that the City buy-in fee from Groveland will be a set price, on a per EDU basis, and will be established through discussions between the two cities' governing authorities.

The current SCADA system is a proprietary system known as Data Flow Systems (DFS). The system is outdated, and the City has reported issues regarding reliability and malfunctions during storm events. It is recommended that the existing wastewater SCADA system be retrofitted to modern industry standards which will allow for system flexibility between different control hardware and software solutions providers. Moving the City away from a proprietary control system allows for more flexibility to system modifications in the future.

Florida Department of Environmental Protection (FDEP) will not fund projects beyond the scope of reasonable growth. It is recommended that the presented plan be built in a phased approach in order to ensure that the plan is affordable to the City and its rate payers. Additionally, the phasing makes certain that the necessary treatment infrastructure in Groveland has completed construction, such as upgrades to the existing Sampey WWTP and the construction of the proposed new Villa City WWTP. Projects were broken down into three phases as described below:

- **Phase 1A** – Dry sewer developments and developments in design or construction with contributing wastewater flows to the existing interconnection to Groveland's Sampey WWTP
- **Phase 1B** – Approved developments with contributing wastewater flows to the existing interconnection to Groveland's Sampey WWTP
- **Phase 2** – Approved developments with contributing wastewater flows to the proposed interconnection to Groveland's Villa City WWTP
- **Phase 3** – Proposed developments with contributing wastewater flows to the proposed interconnection to the existing interconnection to Groveland's Sampey WWTP as well as to the proposed interconnection to Groveland's Villa City WWTP.

Recommended upgrade projects to meet the identified needs and their associated opinion of probable costs (OPC) are shown in Table ES-1 through Table ES-5. The total cost of the recommended projects is estimated to be $57.1 million in 2021 dollars. Details of the project costs are included in Appendix F.

Table ES-1: Selected Plan Proposed Costs

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)[1]	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains[2]	$17,978,000	$1,797,000	$19,775,000	$3,559,000	$592,000	$23,926,000
Lift Stations[3]	$6,868,000	$685,000	$7,553,000	$1,360,000	$226,000	$9,139,000
SCADA Upgrades	$37,000	$3,000	$40,000	$7,000	$1,000	$48,000
Total Base Project Cost without Groveland Buy-In	$24,883,000	$2,485,000	$27,367,000	$4,926,000	$821,000	$33,114,000
					Groveland Interlocal Treatment Buy-in[4]	$24,016,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)	**$57,130,000**

1. Engineering and Inspection costs for SCADA upgrades include costs for construction.
2. Force main costs do not include that associated with the Roper Trails lift station.
3. Lift station costs do not include the Roper Trails or Sunset Lakes lift stations.
4. $4,844,000 of Interlocal Treatment Buy-in is attributed to EDUs connecting to the existing Sampey WWTP. $19,172,000 of the Interlocal Treatment Buy-in is attributed to EDUs connecting to the proposed new WWTP in Groveland.

Table ES-2: Phase 1A Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)[1]	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains[2]	$4,445,000	$445,000	$4,890,000	$880,000	$147,000	$5,917,000
Lift Stations[3]	$1,597,000	$159,000	$1,756,000	$316,000	$53,000	$2,125,000
SCADA Upgrades	$37,000	$3,000	$40,000	$7,000	$1,000	$48,000
Total Base Project Cost without Groveland Buy-In	$6,079,000	$607,000	$6,685,000	$1,203,000	$201,000	$8,089,000
					Groveland Interlocal Treatment Buy-in[4]	$3,141,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)	**$11,231,000**

1. Engineering and Inspection costs for SCADA upgrades include costs for construction and implementation
2. Force main costs do not include that associated with the Roper Trails lift station.
3. Lift station costs do not include the Roper Trails or Sunset Lakes lift stations.
4. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.

Table ES-3: Phase 1B Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains[1]	$2,023,000	$202,000	$2,225,000	$401,000	$67,000	$2,693,000
Lift Stations[2]	$471,000	$47,000	$518,000	$93,000	$16,000	$627,000
Total Base Project Cost without Groveland Buy-In	$2,494,000	$249,000	$2,743,000	$494,000	$83,000	$3,320,000
					Groveland Interlocal Treatment Buy-in[3]	$1,311,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)	**$4,631,000**

1. Force main costs do not include that associated with the Roper Trails lift station.
2. Lift station costs do not include the Roper Trails or Sunset Lakes lift stations.
3. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.

Table ES-4: Phase 2 Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains	$9,874,000	$987,000	$10,861,000	$1,955,000	$325,000	$13,141,000
Lift Stations[1]	$3,655,000	$365,000	$4,020,000	$724,000	$121,000	$4,865,000
Total Base Project Cost without Groveland Buy-In	$13,529,000	$1,352,000	$14,881,000	$2,679,000	$446,000	$18,006,000
					Groveland Interlocal Treatment Buy-in[2]	$6,697,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)[3]	**$24,703,000**

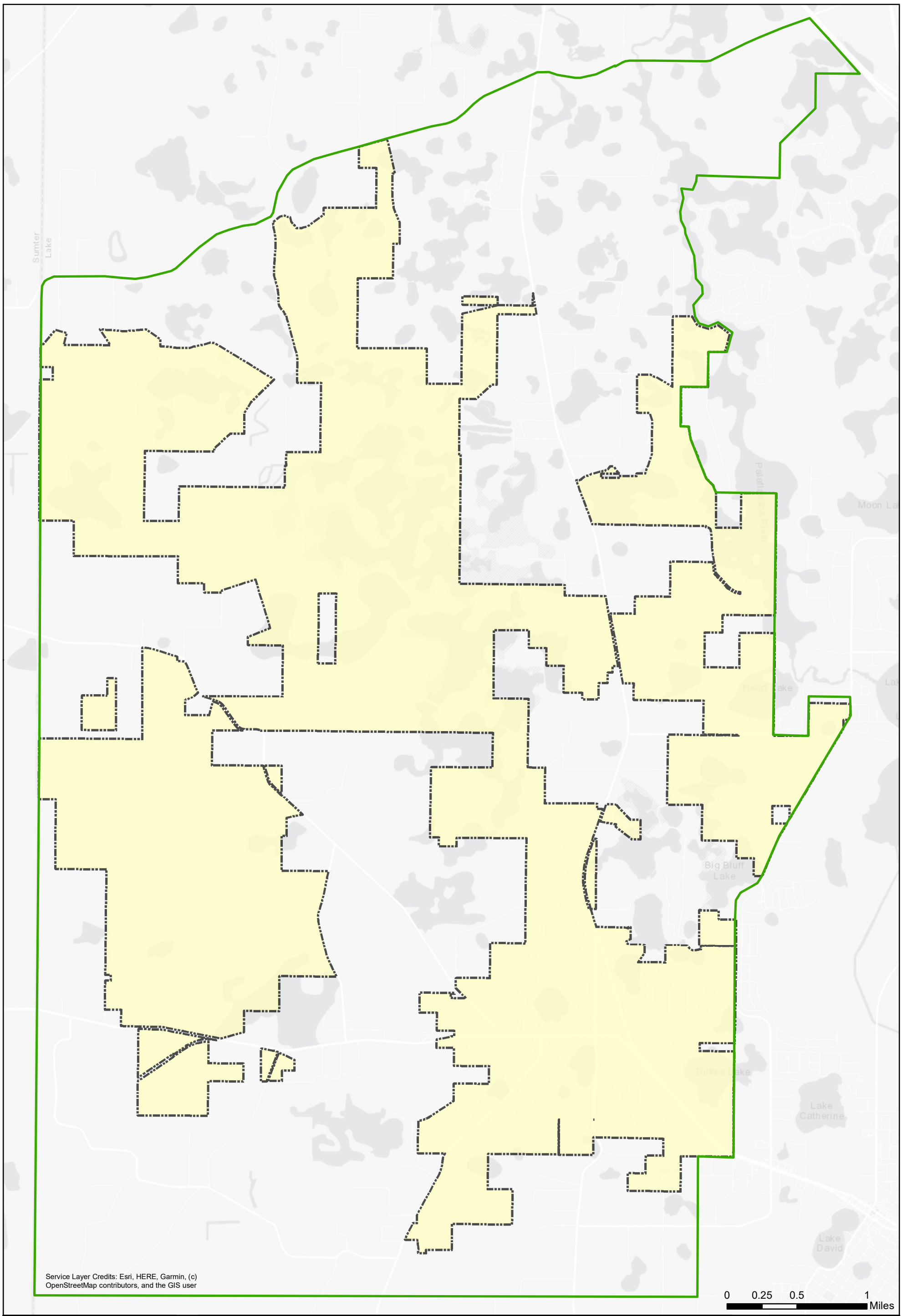
1. Lift Station 6 and Lift Station 8 costs shall be paid over both Phase 2 and Phase 3. Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.
2. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.
3. Construction costs may need to be escalated once project schedule and timing has been established

Table ES-5: Phase 3 Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains	$1,636,000	$163,000	$1,799,000	$323,000	$53,000	$2,175,000
Lift Stations[1]	$1,145,000	$114,000	$1,259,000	$227,000	$38,000	$1,524,000
Total Base Project Cost without Groveland Buy-In	$2,781,000	$277,000	$3,058,000	$550,000	$91,000	$3,699,000
					Groveland Interlocal Treatment Buy-in[2]	$12,867,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)[3]	**$16,566,000**

1. Lift Station 6 and Lift Station 8 costs shall be paid over both Phase 2 and Phase 3. Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.
2. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.
3. Construction costs may need to be escalated once project schedule and timing has been established

The FDEP SRF program is expected to be the financing source for the project. A Capital Financing Plan (CFP) has been prepared to explain to the public and to the State Agency the financial impact on the users of the wastewater system. The CFP is shown in Appendix H and demonstrates that water and sewer operating expenses; existing debt service obligations; and proposed project debt service associated with capital projects identified in this facility plan can be funded through current utility rates, existing approved annual increases, and water and sewer impact fees. No additional rate increase is required.



Planning Area

City of Mascotte

Figure ES-1

Legend

- Future Planning Area City Zoning
- Mascotte City Limits

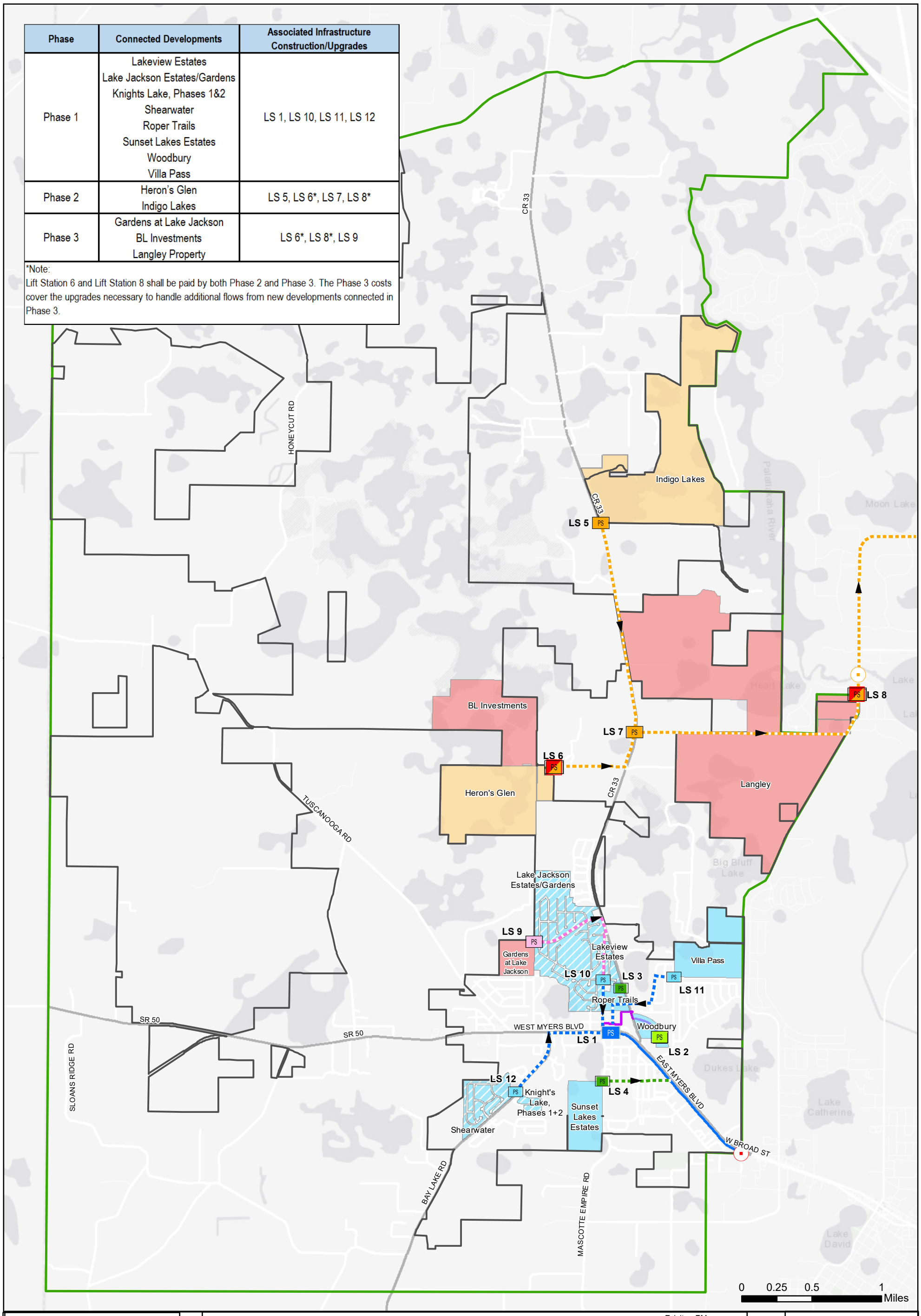
N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Phase	Connected Developments	Associated Infrastructure Construction/Upgrades
Phase 1	Lakeview Estates Lake Jackson Estates/Gardens Knights Lake, Phases 1&2 Shearwater Roper Trails Sunset Lakes Estates Woodbury Villa Pass	LS 1, LS 10, LS 11, LS 12
Phase 2	Heron's Glen Indigo Lakes	LS 5, LS 6*, LS 7, LS 8*
Phase 3	Gardens at Lake Jackson BL Investments Langley Property	LS 6*, LS 8*, LS 9

*Note:
Lift Station 6 and Lift Station 8 shall be paid by both Phase 2 and Phase 3. The Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.



Recommended Plan & Phasing

City of Mascotte

Figure ES-2

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groveland Interconnection
- Proposed Groveland Interconnection
- Phase 1 Connected Development
- Phase 1 Connected Development (Dry Sewer)
- Phase 2 Connected Development
- Phase 3 Connected Development
- Existing LS
- LS Under Construction
- Phase 1 LS Upgrade
- Phase 1 Proposed LS
- Phase 2 Proposed LS
- Phase 2 & 3 Proposed LS
- Phase 3 Proposed LS
- Exisitng FM
- Phase 1 FM Upgrade
- FM in Design
- Phase 1 FM
- Phase 2 FM
- Phase 3 FM

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

1. INTRODUCTION

This document is provided to meet the planning requirements for the Clean Water State Revolving Fund program for the purpose of obtaining funding for new wastewater infrastructure in the City of Mascotte (City). This report addresses the need for improvements to the wastewater system, presents cost comparisons of at least three alternatives for each project component and shows why the selected alternatives maximize cost effectiveness over the planning period and project lifecycle. This plan was developed to be consistent with the City's adopted 2017 Comprehensive Plan.

1.1 Background

The City of Mascotte, located in Lake County, Florida, sits directly west of the City of Groveland on State Road 50. As part of Orlando's continued growth and expansion to the West, nearby communities such as Clermont and Groveland have seen exponential growth over the last decade. Mascotte may be poised for similar growth as developers seek more affordable land within commuting distance to Orlando. The state has committed to expanding State Road 50 for the purposes of economic development and improved evacuation routes. The planning area shown in Figure 1-1 incorporates 41 square miles and includes the City of Mascotte and contiguous surrounding lands in Lake County.

The City of Mascotte does not have a centralized collection system and water resource recovery facility (WRRF). The City has a couple of small developments connected to an active sewer interceptor that connects to the City of Groveland's centralized system for wastewater treatment. The City currently has interlocal agreements with the City of Groveland (Groveland) and the City of Leesburg (Leesburg) to provide wastewater treatment, however there is no current connection to the City of Leesburg system. The City also has an inactive (dry) sewer system within four residential developments that could be connected to a centralized system if Mascotte's system is expanded in the future.

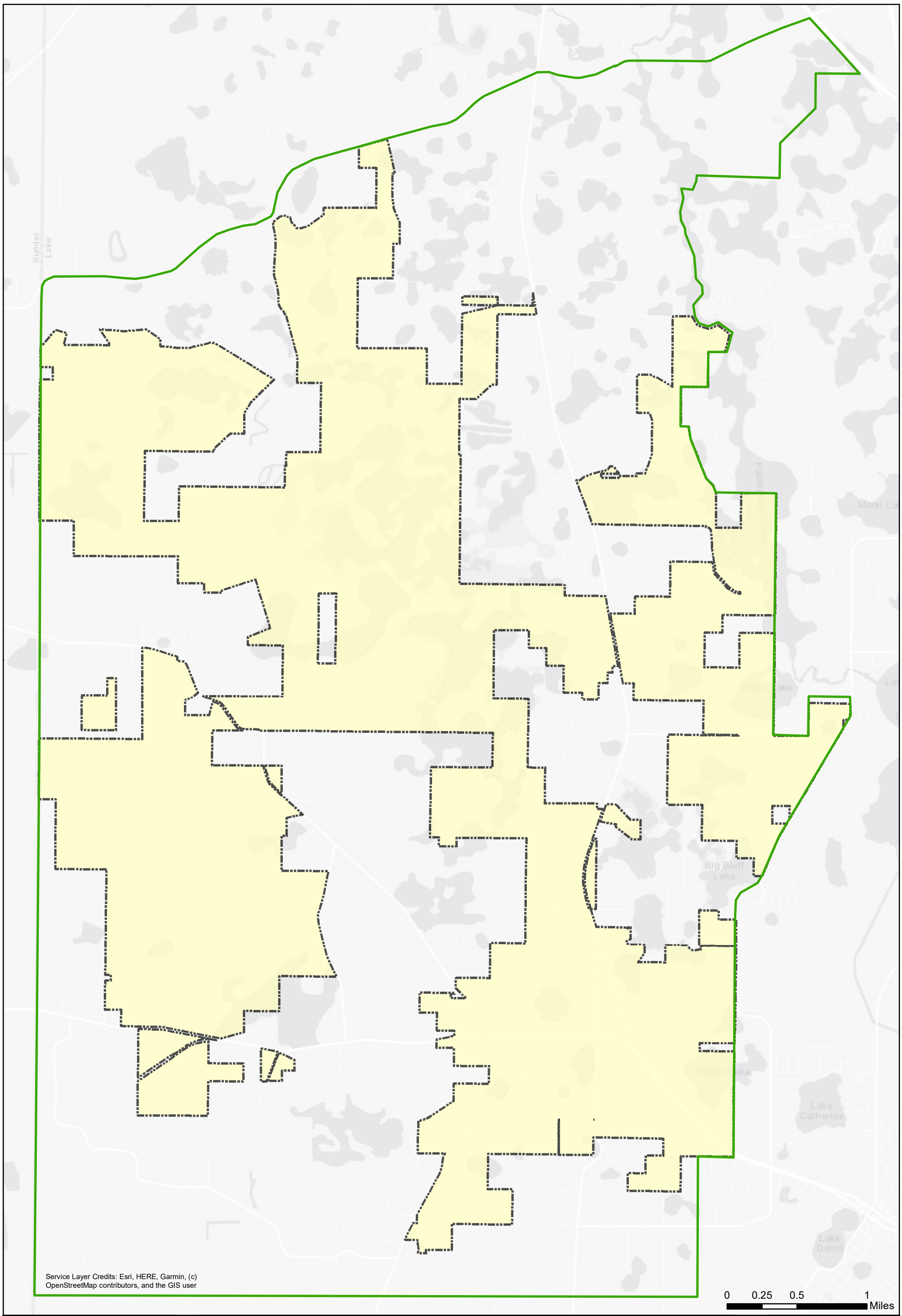
1.2 Need

The Mascotte Clean Water project is funded by the State of Florida Department of Environmental Protection, State Revolving Fund (FDEP SRF). The request for inclusion submitted to the FDEP-SRF by the City included the following proposed improvements to the City's existing wastewater system.

The City does not have a municipal water resources recovery facility (WRRF) and is depending on Groveland for treatment of its current and future flows. The decision to enter into an interlocal agreement with Groveland Leesburg for wastewater treatment and disposal was based on economics and the City's capability to assume the responsibility to own, operate and maintain a wastewater treatment and disposal facility. The City has since begun the process of evaluating the interlocal agreement with Groveland to expand the wastewater service.

While they currently have an agreement with Groveland to send wastewater flows up to 0.250 MGD, it will not be enough to accommodate the future growth and flows projected for the City. This includes connection of flows from the four existing subdivisions (approximately 550 homes) within the City service area that were constructed with a dry gravity collection system that currently remains inactive. The wastewater system requires a local and regional treatment evaluation to meet the demands of the future growth of the City.

The City currently uses a proprietary SCADA system known as Data Flow Systems (DFS) that serves the two wastewater lift stations. The system is beyond its useful life and the City reports the system is unreliable at times malfunctioning during storm events. With a proprietary system, service and support can only be sourced from a single vendor, thus not allowing the City to benefit from competitive bid pricing. The current SCADA system should be evaluated to establish the required level of retrofitting or replacement to maintain and support operations of the wastewater system.



Planning Area

City of Mascotte

Figure 1-1

Legend

- Future Planning Area City Zoning
- Mascotte City Limits

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Figure Exported: 6/15/2021 By: cwallitsch Using: \\woodardcurran.net\Shared\Projects\0232301.03 Mascotte CW Feity Plan\wip\GIS\PDFs\MXDs\Figure 1-1 – Planning Area.mxd

1.3 Scope of Study

The scope of the facilities plan is described below:

- Inventory existing facilities, service area characteristics, and environmental conditions;
- Establish design needs for the planning period;
- Identify and evaluate various wastewater system alternatives to satisfy the planning needs;
- Recommend the most cost effective, environmentally sound facilities to meet the planning needs;
- Describe in detail the recommended facilities and their cost;
- Present a schedule of implementation of the recommended facilities;
- Identify any adverse environmental impacts and purpose mitigating measures; and
- Review of infrastructure demand and capability to meet demand for the following planning activities:
    - Central Sewer System Evaluation and Treatment and Disposal Options
    - SCADA Upgrades

1.4 Facilities Planning Overview

Facilities planning is the process used to determine water pollution control system needs for a 20-year planning period. Strategies are developed within the plan to meet those needs, and the basis for subsequent design and construction is provided. In addition to an evaluation of the existing wastewater collection system and future system needs, the existing and projected demographic characteristics, topographic, hydrologic, and institutional features of the study area and their impact on the wastewater treatment needs are also examined.

The future planning period includes the 20-year period beginning in the year 2021 and extending through the year 2041. Several alternatives were investigated to determine the most feasible methods for meeting the City's needs as well as anticipated regulatory requirements during the future planning period.

1.5 Reference Standards and Guidelines

This Report has been organized such that it is compatible with the Facilities Planning guidance document published by the Florida Department of Environmental Protection (DEP) Environmental Protection Agency in 2000. Technical guidelines in the Ten State "Recommended Standards for Wastewater Facilities, and the "MOP-8 - Design of Municipal Wastewater Treatment Plants" as published by the Water Environment Federation and the American Society of Civil Engineers were referenced for the alternatives analysis and recommendations.

2. EXISTING AND FUTURE CONDITIONS

Section 2 describes the existing physical, organizational, environmental, and demographic conditions within the planning area. This information is used to establish the existing conditions, project future development, and assess needs within the planning area related to the future wastewater management requirements. This section describes the existing condition and limitations of the wastewater collection system. The current wastewater flows are outlined and used in conjunction with demographic projections to estimate the future flows of the system during the planning period.

2.1 Description of Planning Area

2.1.1 Planning/Service/Project Area

With the anticipation of continued growth, the planning area extends beyond the existing city limits of Mascotte. The planning area is bordered by Groveland to the east, City of Tuscanooga to the West, Florida Highway 33 to the North, and South Bay Lake Road to the South. Surface features within the planning area include creeks, lakes, rivers, and wetlands with sparse rolling hills. The planning area has a warm climate for most of the year.

2.1.2 Climate

Located in central Florida, the City is within the boundary of Lake County, Florida. The city's climate is characterized as hot and humid for approximately six months out of the year with historical average daily high temperature of about 91.8 degrees Fahrenheit. Mascotte's cold season is relatively short and dry and usually lasts from December to March. The historic average daily low temperature is about 46.4 degrees Fahrenheit during winter. Cooler than most places in Florida, the City has approximately six (6) days when the temperature can drop below freezing through the night hours. Historical rainfall averages approximately 50.5 inches with precipitation occurring approximately 111 days out of the year, which is higher than the United States average of 106.2 days of precipitation a year. Table 2-1 summarizes historical climate averages.

Table 2-1: Summary of Climate Averages

	Mascotte, Florida	United States
Rainfall (in)	50.5	38.1
Snowfall (in)	0.0	27.8
Precipitation (days)	111.1	106.2
Sunny (days)	231	205
Average July High (deg F)	91.8	85.8
Average January Low (deg F)	46.4	21.7
UV Index	6.3	4.3
Elevation (feet)	138	2,443

2.1.3 Topography and Drainage

According to the United States Geological Survey Topographic Map and the United States Fish and Wildlife Service National Wetlands Inventory, the planning area consists of small hills, freshwater ponds, freshwater wetlands, and many lakes. Average elevation of the City is at 138 feet above sea level with only moderate variations in elevation. The drainage of the planning area is comprised of the following:

- 39.5% of soils are characterized as excessively drained, well drained, or moderately drained;
- 55.0% of the soils are poorly drained, somewhat drained, or very poorly drained; and
- 5.0% is water

The following section lists the detailed information on specific types of soils and drainage class within the planning area. Figure 2-1 shows the soil mapping within the planning area.

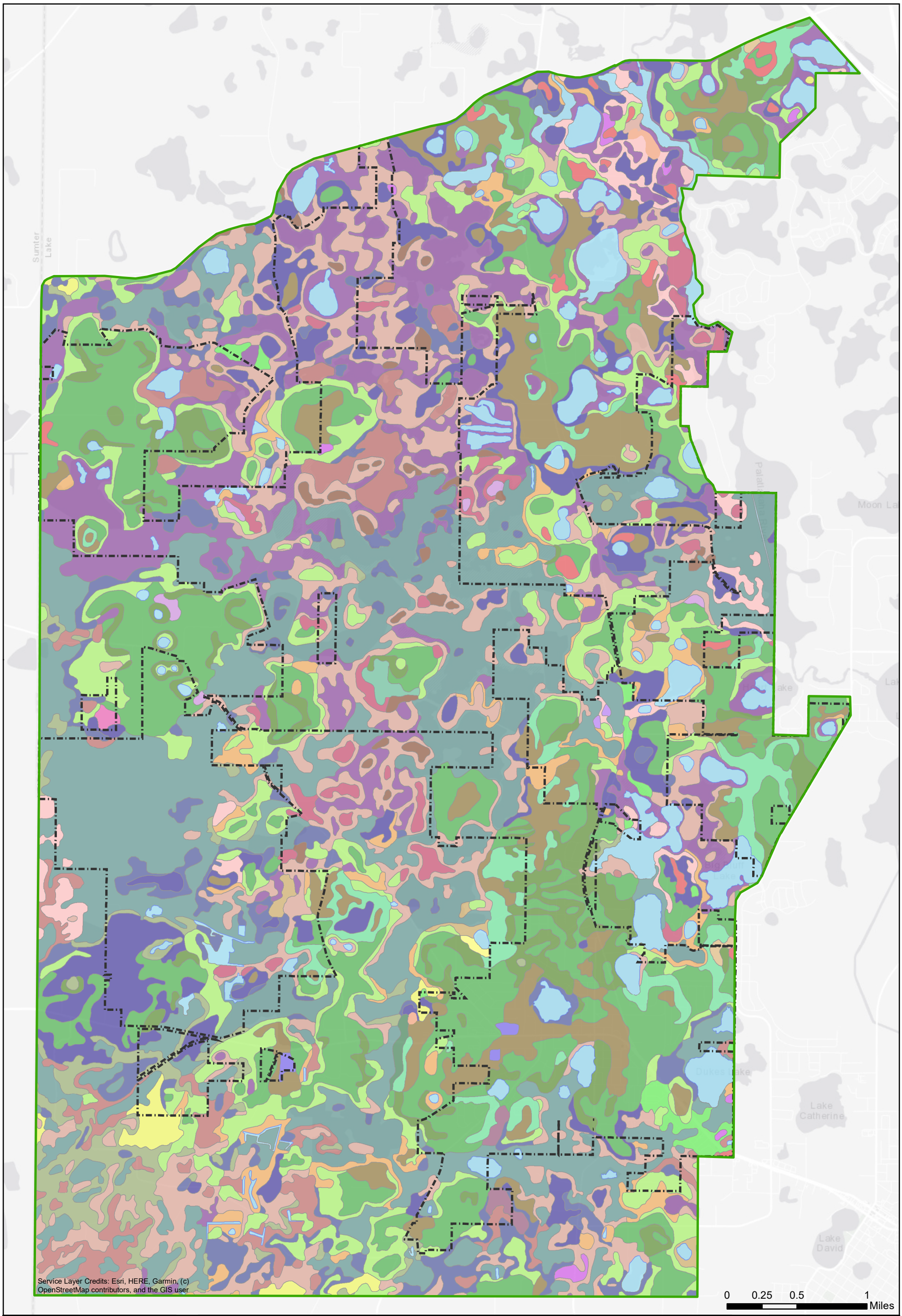
2.1.4 Geology, Soils, Physiography

According to the United States Department of Agriculture Natural Resources Conservation Service Soil Survey denotes that planning area is composed of thirty different types of soils, as provided in Table 2-2. Approximately 75% of the land area is composed of soils that are classified as moderately high to very high capacity to transmit water. The remaining percent is classified as very low to moderately low capacity to transmit water.

The most predominant soil types found in the planning area are characterized as sand to sandy clay. The surface to ten inches below, upper horizons, of soils in the planning area are classified as 19.2% muck, 2.1% sandy clay, 0.7% fine sand, and 72.6% sand. Only swamp soil, at 0.2%, is classified as muck at greater depths. Figure 2-1 shows the soil mapping within the planning area.

Table 2-2: Soil Types Within Planning Area

Soil Type	Drainage Class	Percentage of Planning Area
1) Sparr Sand, 0-5% Slopes	Somewhat poorly drained	5.5%
2) Sparr Sand, 5-12% Slopes	Somewhat poorly drained	0.1%
4) Anclote & Myakka Soils	Very poorly drained	0.5%
5) Apopka Sand, 0-5% Slopes	Well drained	5.4%
6) Apopka Sand, 5-12% Slopes	Well drained	2.3%
7) Astatula Sand, 0-5% Slopes	Excessively drained	0.1%
8) Candler Sand, 0-5% Slopes	Excessively drained	13.9%
9) Candler Sand, 5-12% Slopes	Excessively drained	4.0%
12) Cassia Sand	Somewhat poorly drained	0.5%
14) Eureka Loamy Fine Sand	Poorly drained	0%
17) Arents	Somewhat poorly drained	2.1%
22) Lake Sand	Excessively drained	0%
24) Kendrick Sand, 0-5% Slopes	Well drained	0.5%
25) Kendrick Sand, 5-8% Slopes	Well drained	0.1
28) Myakka-Myakka, Wet, Sands 0-2% Slopes	Poorly drained	10.6%
30) Lochloosa Sand	Somewhat poorly drained	0.2%
32) Oklawaha Muck	Very poorly drained	19.0%
33) Ona-Ona, wet, fine sand, 0-2% Slopes	Poorly drained	0.2%
34) Orlando Fine Sand	Well drained	0%
35) Paola Sand, 0-5% Slopes	Excessively drained	0.1%
37) Ellzey Sand	Poorly drained	0.5%
38) Placid Sand, Frequently Ponded, 0-2% Slopes	Very poorly drained	2.7%
39) Seffner Sand	Somewhat poorly drained	2.2%
40) Placid & Myakka Sand, Depressional	Very poorly drained	9.3%
42) Pompano Sand	Moderately well drained	4.0%
44) Swamp	Very poorly drained	0.2%
45) Tavares Sand, 0-5% Slopes	Moderately well drained	8.1%
46) Orsino Sand	Moderately well drained	1.1%
47) Kendrick Sand, Thin Subsurface	Well drained	0.1%
49) Wauchula Sand	Poorly drained	1.3%



Soil Composition Map

City of Mascotte, FL

Figure 2-1

Legend

Future Planning Area City Zoning

Mascotte City Limits

***See accompanying page for Soil Map Units Legend**

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Soil Map Units

- Anclote and Myakka soils
- Apopka sand, 0 to 5 percent slopes
- Apopka sand, 5 to 12 percent slopes
- Arents
- Astatula sand, 0 to 5 percent slopes
- Borrow Pits
- Candler sand, 0 to 5 percent slopes
- Candler sand, 5 to 12 percent slopes
- Cassia sand
- Ellzey sand
- Eureka loamy fine sand
- Kendrick sand, 0 to 5 percent slopes
- Kendrick sand, 5 to 8 percent slopes
- Kendrick sand, thin subsurface
- Lake sand, 5 to 12 percent slopes
- Lochloosa sand
- Myakka sand
- Oklawaha muck
- Ona fine sand
- Orlando fine sand, 0 to 5 percent slopes
- Orsino sand
- Paola sand, 0 to 5 percent slopes
- Placid and Myakka sands, depressional
- Placid sand, depressional
- Pompano sand
- Seffner sand
- Sparr sand, 0 to 5 percent slopes
- Sparr sand, 5 to 12 percent slopes
- Swamp
- Tavares sand, 0 to 5 percent slopes
- Water
- Wauchula sand

Figure Exported: 7/6/2021 By: cwallitsch Using:

Soil Composition Map

Soil Map Units Legend
Mascotte, FL

Figure 2-1

WOODARD &CURRAN

Project #: 0232301.03
Map Created: July 2021

2.1.5 Surface and Ground Water Hydrology, Quality, and Uses

2.1.5.1 Surface and Ground Water Hydrology

All surface waters within the planning area are designated Class III waters, suitable for recreation and for propagation of fish and wildlife. The planning area is located within the St. Johns River Watershed Management District (SJRWMD). The source of drinking water for the planning area is the Upper Floridan Aquifer (UFA). The UFA is typically composed of limestone and dolomite and has high flows near the center of the state where the planning area is located. There are no wild or scenic rivers in the planning area.

2.1.5.2 Surface and Ground Water Quality

Major waterbodies located within the planning area include Honeycut Lake, Bird Lake, Lake Indigo, Big Prairie Lake, Lake Linda, Dukes Lake, Sunset Lake, Lake Jackson, Big Bluff Lake, Lake Isabel, Gourd Lake, Dilly Lake, and Hart Lake. The water quality for the surface water bodies in the planning area is considered good. All of the groundwaters in the planning area are designated class G-II (suitable for potable water use). All waterbodies are considered not impaired according to the FDEP Impaired Waters Rule. There are various areas of known contamination within the planning area, shown in Figure 2-2.

2.1.5.3 Water Uses

The UFA is used as the source of drinking water for the City's utility service area, to include supplemental reclaimed water for irrigation. Surface waters in the planning area are used for recreation purposes such as boating and fishing.

2.1.6 Source Water Protection

In 2020, an assessment of potential contamination to the source water was completed as part of the Source Water Assessment and Protection Program (SWAPP) with FDEP under the Safe Drinking Water Act (SDWA). The source water protection area is the area encompassed within a five-year groundwater travel time, defined as the area from which water will drain to a well pumping at the average daily permitted rate for a five-year period. In this area all potential sources of contamination were identified and given a susceptibility score and a concern level. Per the 2020 SWAPP, there are four (4) unique potential sources of contamination within the protection areas for the potable water wells operated by the City, shown in Figure 2-3. Table 2-3 provides the list of potential contamination sources. It should be noted that the Cal-Maine Foods facility is classified as two different unique sources, a wastewater site and wastewater facility. The potential sources of contamination range from low to moderate concern level, with only the groundwater contamination delineated area registering a moderate concern level. The 2020 SWAPP results for the City can be found in Appendix A.

Groundwater Contamination Areas

City of Mascotte

Figure 2-2

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groundwater Contamination Areas

N

0 0.25 0.5 1 Miles

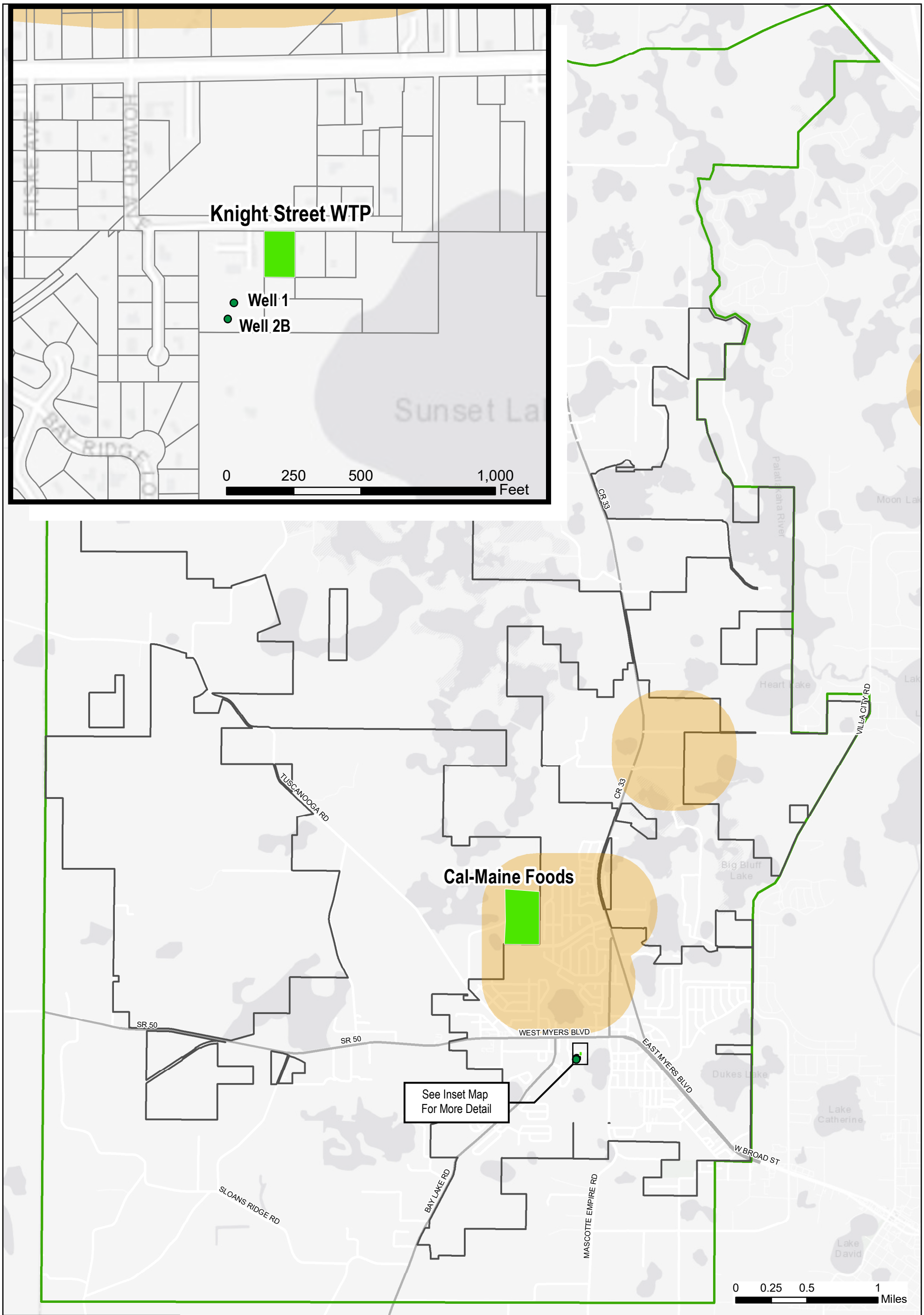
Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: Lake County GIS**

Figure Exported: 6/16/2021 By: cwallisch Using: \\woodardcurran.net\shared\Projects\0232301.03 Mascotte CW Fcity Planwip\GIS\PDFs\MXDs\Figure 2-2 Groundwater Contamination.mxd



Groundwater Contamination Sources

City of Mascotte

Figure 2-3

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groundwater Contamination Areas
- Potential Source of Contamination
- Tax Parcels
- Wells

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

Figure Exported: 8/6/2021 By: sbuckley Using: \\woodardcurran.net\shared\Projects\0232301.03 Mascotte CW Fcity Plan\wip\GIS\PDFs\MXDs\Figure 2-3 Well Protection Figure for CW Proposed Collection System Upgrades.mxd

Table 2-3: Summary of Potential Source Water Contamination Sources

Facility Type	Facility Class	Status	Name	Susceptibility Score	Concern Level
Industrial Wastewater	Wastewater Site	A	Cal-Maine Foods-Mascotte Facility	0.03	Low
Industrial Wastewater	Wastewater Facility	A	Cal-Maine Foods-Mascotte Facility	0.33	Low
Petroleum Storage Tank	Local Government	Open	Mascotte City-Knight St. WTP	8.33	Low
Delineated Areas	N/A	Active	Zone ID: 35263171	33.33	Moderate

2.1.7 Environmental Sensitive Areas or Features

2.1.7.1 Wetlands

There are numerous freshwater ponds, lakes, and creeks that border surface water bodies within the planning area according to the United States Fish and Wildlife National Wetlands Inventory Map. Wetlands are located throughout the planning area. The wetlands consist of both freshwater emergent wetlands and freshwater forested/shrub wetlands. The planning and design include practicable measures to minimize potential adverse impacts to wetlands. Figure 2-4 presents wetlands in the planning area.

2.1.7.2 Environmentally Sensitive Lands

According to the United States Department of Agriculture Natural Resources Conservation Service, 39.5% of the planning area consists of farmland of unique importance, defined as land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Table 2-4 below provides a summary of information on the farmland of unique importance within the planning area. A map of the unique farmland is shown in Figure 2-5. A map of the environmentally sensitive areas is provided in Figure 2-6.

Table 2-4: Farmland of Unique Importance

Soil Type	Percentage	Acreage
1) Sparr Sand, 0-5 Percent Slopes	5.5%	1,458 Acres
2) Sparr Sand, 5-12 Percent Slopes	0.1%	19 Acres
5) Apopka Sand, 0-5 Percent Slopes	5.4%	1,434 Acres
6) Apopka Sand, 5-12 Percent Slopes	2.3%	6144 Acres
8) Candler Sand, 0-5 Percent Slopes	13.9%	3,673 Acres
9) Candler Sand, 5-12 Percent Slopes	4.0%	1,047 Acres
30) Lochloosa Sand	0.2%	40 Acres
45) Tavares Sand, 0-5 Percent Slopes	8.1%	2,124 Acres
TOTAL:	**39.5%**	**15,939 Acres**

2.1.7.3 Plant and Animal Communities

The United States Fish and Wildlife Service IPaC list includes sixteen (16) different species of birds, reptiles, flowering plants within the planning area. No critical habitats were found within the planning area. Species are classified as candidate, proposed threatened, threatened, or endangered. Table 2-5 below shows the endangered species located in t

Wetland Map

City of Mascotte

Figure 2-4

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Mascotte Wetlands

N

0 0.25 0.5 1 Miles

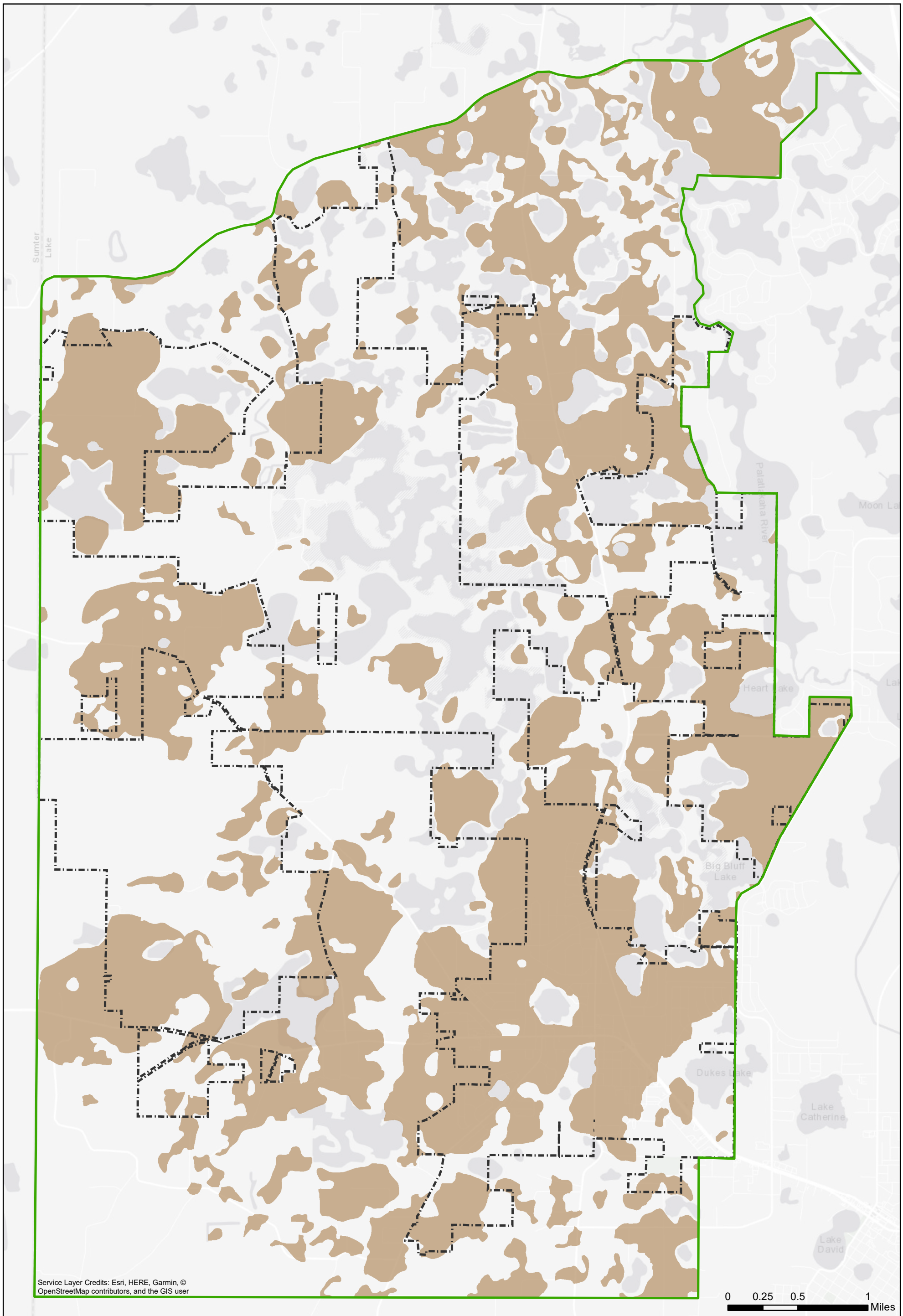
Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Figure Exported: 6/16/2021 By: dwallitsch Using: \\woodardcurran.net\shared\Projects\0232301.03 Mascotte CW Fdty Plan\wip\GIS\PDFs\MXDs\Figure 2-3 Wetlands.mxd

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: Lake County GIS**



Unique Farmland Map

City of Mascotte, FL

Figure 2-5

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Unique Farmland

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions.
Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: Lake County GIS**

Figure Exported: 6/16/2021 By: cwallitsch Using: \\woodardcurran.net\shared\Projects\0232301.03 Mascotte CW Fofty Plan\wip\GIS\PDFs\MXDs\Figure 2-4 Unique Farmland.mxd

Environmentally Sensitive Areas

City of Mascotte

Figure 2-6

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Environmentally Sensitive Areas
- Green Swamps

N

0 0.25 0.5 1 Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: Lake County GIS**

Figure Exported: 6/16/2021 By: cwallitsch Using: \\woodardcurran.net\shared\Projects\0232301.03 Mascotte CW Fdty Plan\wip\GIS\PDFs\MXDs\Figure 2-5 Environmentally Sensitive Areas.mxd

he planning area and the status of each one. Because the proposed project is to take place in previously disturbed areas, the project is not likely to adversely affect resources protected by the Endangered Species Act of 1973.

Table 2-5: Endangered Species List Within Planning Area

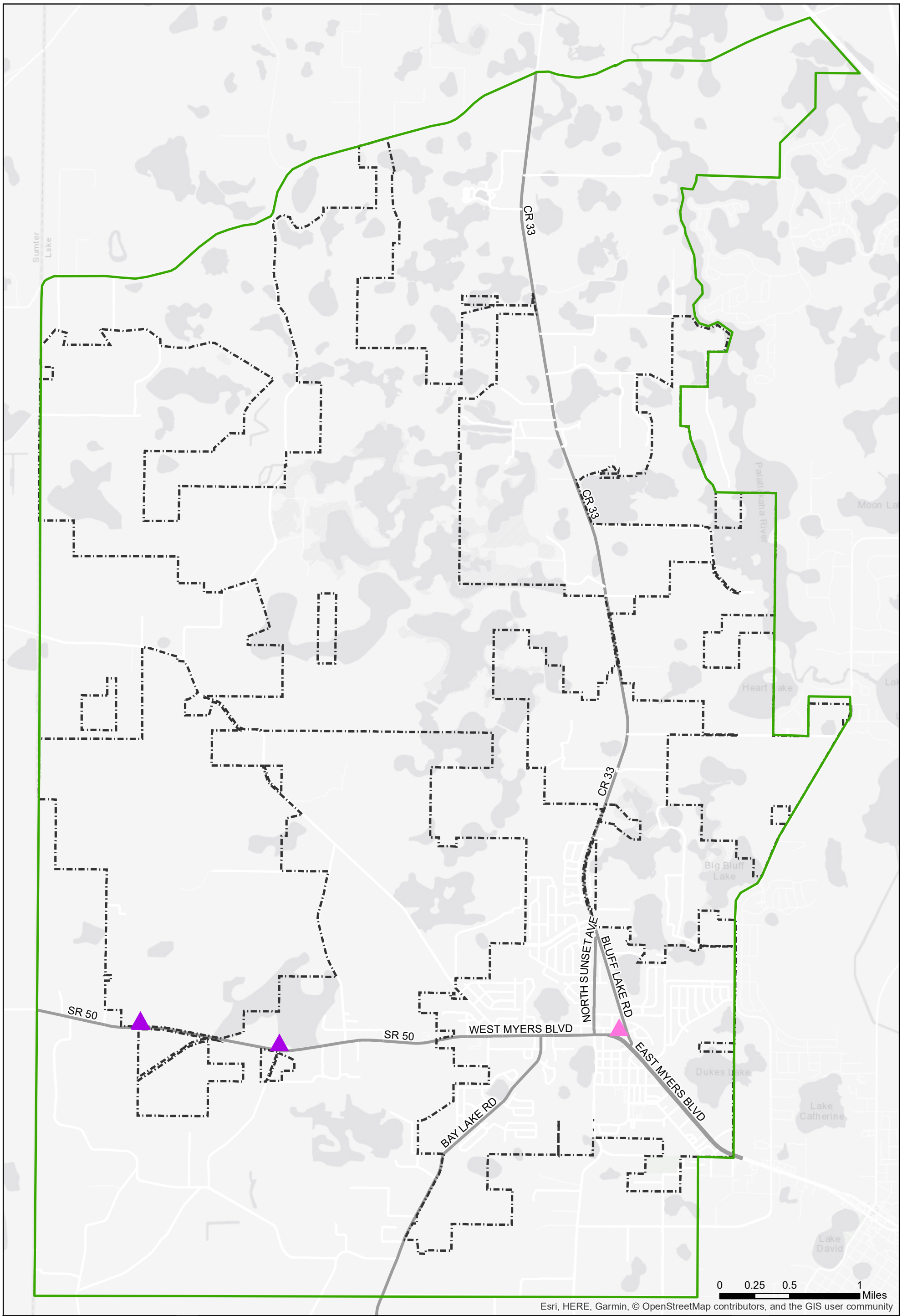
Category	Species Common Name	Species Scientific Name	Status
Birds	Eastern Black Rail	Laterallus Jamaicensis SSP. Jamaicensis	Threatened
	Everglade Snail Kite	Rostrhamus Sociabilis Plumbeus	Endangered
	Wood Stork	Mycteria Americana	Threatened
Reptiles	Eastern Indigo Snake	Drymarchon Corais Couperi	Threatened
	Gopher Tortoise	Gopherus Polyphemus	Candidate
	Sand Skink	Neoseps Reynoldsi	Threatened
Flowering Plants	Britton's Beargrass	Nolina brittoniana	Endangered
	Cooley's Water-Willow	Justicia cooleyi	Endangered
	Florida Bonamia	Bonamia grandiflora	Threatened
Category	**Species Common Name**	**Species Scientific Name**	**Status**
	Lewton's Polygala	Polygala Lewtonii	Endangered
	Papery Whitlow-wort	Paronychia Chartacea	Threatened
	Pigeon Wings	Clitoria fragrans	Threatened
	Pygmy Fringe-tree	Chionanthus pygmaeus	Endangered
	Scrub Buckwheat	Eriogonum longifolium var. gnaphalifolium	Threatened
	Scrub Plums	Prunus geniculata	Endangered
	Wide-leaf Warea	Warea amplexifolia	Endangered

2.1.7.4 Archeological and Historical Sites

According to the National Register of Historic Places Catalog, there are no historical or archaeological sites listed on the national register within the planning area. The proposed project will not have an impact on known historical or archaeological sites. A map of historical sites is provided in Figure 2-7.

2.1.8 Flood Plains

Flood zones for the planning area are designated in Figure 2-8. Flood plains are confined to wetlands and areas directly surrounding ponds and lakes. All flood zones in the planning area are categorized as Zone A, Zone AE or Zone X. The Federal Emergency Management Agency (FEMA) defines Zone A and Zone AE as areas subject to inundation by the one percent (1%) annual chance flood event, base flood elevations or flood depths have been determined for Zone AE



Historical Sites Map

City of Mascotte

Figure 2-7

Legend

Future Planning Area City Zoning

Mascotte City Limits

National Register of Historical Places

Structure (Eligible for National Historic Registry)

Structure (Potentially Eligible for National HIstoric Registry)

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Flood Zones

City of Mascotte

Figure 2-8

Legend

- Future Planning Area City Zoning
- Mascotte City Limits

Flood Zones

- A
- AE
- X

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user

0 0.25 0.5 1 Miles

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Figure Exported: 6/16/2021 By: cwallitsch Using: \\woodardcurran.net\shared\Projects\0232301.03 Mascotte CW Fcity Planwip\GIS\PDFs\MXDs\Figure 2-7 Flood Zones.mxd

but have not been determined for Zone A. Zone X are areas of minimal flood hazard and are determined to be outside the point two percent (0.2%) annual chance floodplain.

2.1.9 Air Quality

In 2019 the Lake County Air Quality Index was rated "Good" for 326 days of the year and only one day classified as "unhealthy for sensitive groups." According to Florida Department of Environmental Protection (FDEP), Lake County is classified as an area of attainment with respect to the National Ambient Air Quality Standards for Ozone. No other criteria air pollutants are monitored in this area. There is no major source of emissions and five (5) minor sources of emissions permitted by FDEP in the planning area, shown in Figure 2-9.

The City plans to follow all Clean Air requirements set by the FDEP. Emissions from construction vehicles during construction is the only effect on air quality that is anticipated. Construction is anticipated to last twenty-four (24) months. Project activities will be monitored by the FDEP. There are no anticipated long-term environmental consequences in regard to air quality.

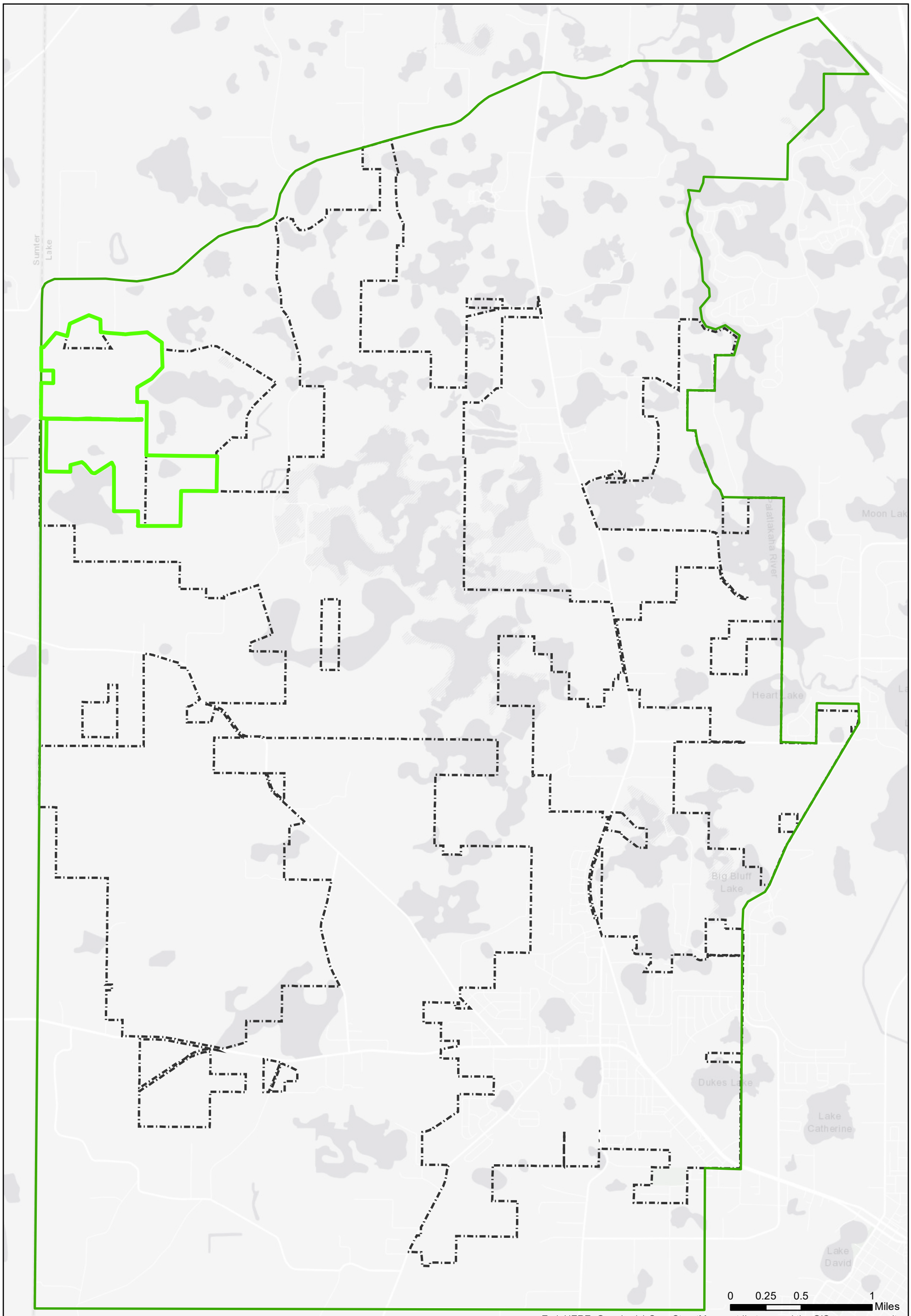
2.1.10 Upper Ocklawaha Basin Management Action Plan

Adopted in 2014, The Phase 2 Upper Ocklawaha Basin Management Action Plan (BMAP) identified the Palatlakaha River as one of five priority water bodies in the basin that would not meet their total maximum daily loads (TMDLs) without additional effort and management strategies. A common BMAP restoration strategy is implementing wastewater system infrastructure improvements since these will likely reduce nutrient loadings to water bodies. The BMAP presents the allocations or assignment of loading reductions for developed urban land uses and septic systems (within 200 meters of waterbodies) for the priority waterbodies. The focus of the Upper Ocklawaha BMAP is to reduce the loading of TP, which is the primary pollutant contributing to the impairment of the five priority waterbodies and 2017 adopted TMDLs. In the Palatlakaha River, Total Nitrogen contributes to the problem, and biochemical oxygen demand (BOD) was also identified as a pollutant contributing to the impairment in the Palatlakaha River. Although the BMAP currently focuses exclusively on TP, the restoration activities under the BMAP are also expected to result in reductions in TN and BOD. Pounds of total phosphorus per year net estimated load for the Palatlakaha River is two thousand seven hundred seventy-nine (2,779). With a Total Maximum Daily Load of two thousand two hundred seven (2,207), required total phosphorus loading reduction to meet TMDL is five hundred seventy-two (572). Adopted BMAP areas within the planning area are provided in Figure 2-10.

2.2 Socio-Economic Conditions

2.2.1 Population and Anticipated Growth

The population of Mascotte is concentrated in urban areas; 79% of the population of Mascotte lives in an urban area and 21% reside in areas that are considered rural. Urban areas are defined as locations of population densities greater than 2,500 inhabitants per square mile. The areas outside urban places, regardless of population density, are considered rural. Mascotte does not have a large transient population like many other areas within Florida, as most residents live in the City year-round. According to the U.S. Census American Community Survey (ACS) which is updated annually, it is calculated that 78.0% of City houses are owner-occupied. Current census data, 2010, for the service area corresponds to census tracts, 312.02, 312.03, 312.04, and 312.05, as shown in Figure 2-11 and summarized in Table 2-6.



Active Air - Permitted Facilities

City of Mascotte

Figure 2-9

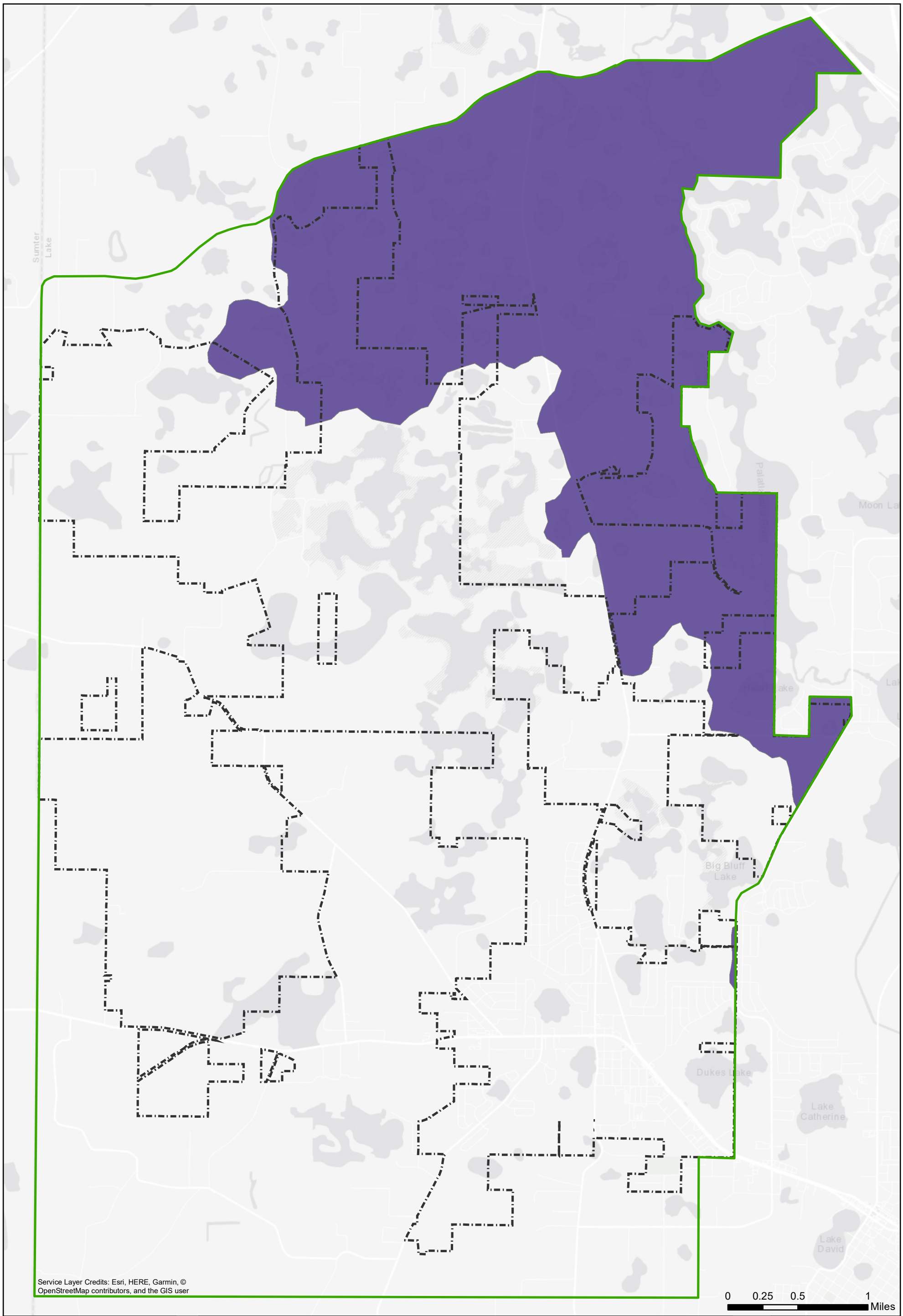
Legend

- Mascotte City Limits
- Future Planning Area City Zoning
- **Active Air Permitted Facility**
- Minor Source

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: April 2021



Basin Management Action Plan Area (BMAP)

City of Mascotte, FL

Figure 2-10

Legend

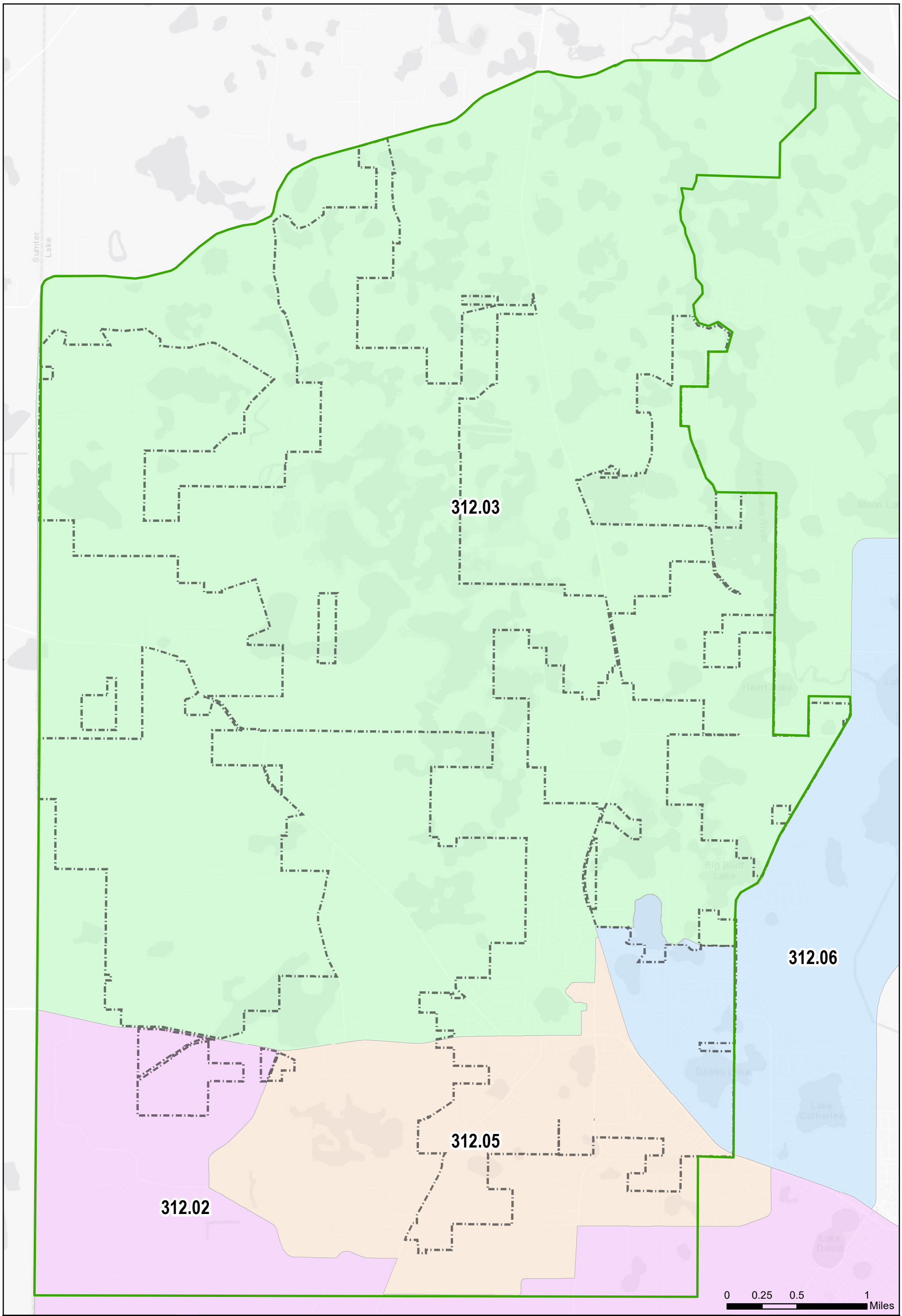
- Future Planning Area City Zoning
- Adopted BMAPs
- Mascotte City Limits

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: Lake County GIS**



2020 Census Tracts

City of Mascotte

Figure 2-11

Legend

- Future Planning Area City Zoning
- Mascotte City Limits

Census Tracts (2020)

- 312.02
- 312.03
- 312.05
- 312.06

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: June 2021

Table 2-6: Census Data Summary

Population, April 1st, 2010	5,089
Land Area in square miles, 2010	11.38
Owner-occupied housing unit rate 2015-2019	78.0%
Households, 2015-2019	1,669
Persons per household, 2015-2019	3.43
Median household income (in 2019 dollars) 2015-2019	$43,544
Persons in poverty, percent	26.5%

Data from United States Census Bureau

The identified service area population data demonstrates a total of 5,089 capita of which 26.5% are considered persons in poverty income level. The persons per household average is 3.43 which demonstrates 394 households that fall within the poverty income level. The minority population is estimated at 20% of the total population.

It is expected that the proposed project will have no adverse effect on poverty demographics or minority individuals located within the service district. Safe, reliable, and accessible potable water supply and sanitation services are critical to the greater population's public health. The proposed project addresses water quality, treatment and services throughout the district. The project will predominantly occur within disturbed rights-of-way and on disturbed property that will have no significant impact. No additional impacts to minorities or low-income households outside of previously disturbed property are expected. Identified improvements incorporated in this plan address a twenty-year planning period and provide continuous public service to insure no adverse effects on human health.

The population projection for the 2021-2041 planning period in five-year increments is based on population projections from the University of Florida Shimberg Center for Affordable Housing, Bureau of Economic and Business Research (BEBR) and the U.S. Census ACS. Since population projection BEBR data is only available at the county level, the high projected growth rates for Lake County were evaluated against the BEBR 2020 estimate for Mascotte of 6,447 and the projected population based on future developments. More specifically, when completing the population projection, the City analyzed all developments with approved and pending Developer Agreements, as well as those with Developer Agreements in progress. Table 2-7 and Figure 2-12 reflect the City's population projections for the 2021 to 2041 planning period.

Table 2-7: Population Projections per Lake County High Growth

Projection	2021	2026	2031	2036	2041	% Growth Rate (over 20 years)
Lake County High Growth Population Projections[1]	384,400	440,400	496,700	546,800	593,400	2.2%
Mascotte Approved Development Growth Population Projection[2]	6,447	8,824	12,408	14,439	14,785	4.2%
Mascotte Full Buildout Growth Population Projection[3]	6,447	10,556	16,884	23,511	26,602	7.3%

1. Data from University of Florida Shimberg Center for Affordable Housing, Bureau of Economic and Business Research
2. Based on growth realized from Approved Developments. Population projection based on planned residential developments expected to be constructed by 2041. See Section 2.2.1.1.2 for more detail. Populations estimated based on 3.43 persons per household.
3. Based on growth realized from Proposed, Pending and Approved Developments. Population projection based on planned residential developments expected to be constructed by 2041. See Section 2.2.1.1.2 for more detail. Populations estimated based on 3.43 persons per household.

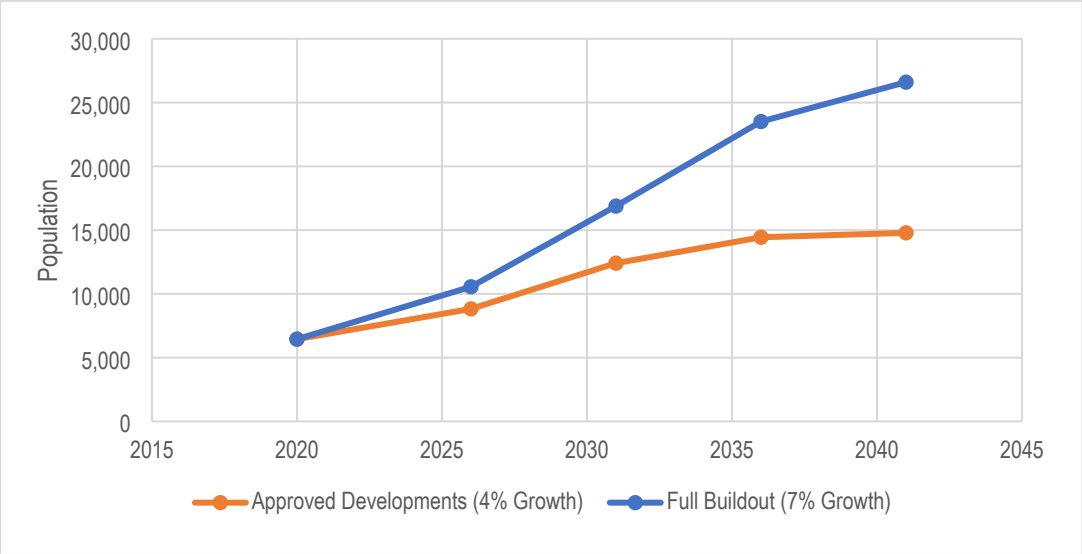


Figure 2-12: Projected Population Growth

2.2.1.1 Residential

Four existing subdivisions within the City of Mascotte were developed with the intent of connecting to a centralized sewer system. A gravity collection system currently exists for each subdivision serving approximately 550 homes, however none of the subdivisions are connected to the system.

In addition to the existing subdivisions that have dry sewer ready to be connected, the City also has several planned residential developments anticipated to contribute additional wastewater flow. These are further discussed in the subsequent sections.

2.2.1.1.1 Dry Sewer Developments

The four existing developments with dry sewers are expected to connect to the existing collection system within the planning period. The list of developments and associated number of homes were provided by the City and are listed in Table 2-8 and are shown in Figure 2-13.

Table 2-8: Dry Sewer Developments

Development Name	Approximate Number of Units
Shearwater	182
Knights Lake, Phases 1&2	116
Lake Jackson Estates/Gardens	233
Lakeview Estates	23

2.2.1.1.2 Planned Developments

There are several planned developments within the City that are either currently in construction, have an approved Developers' Agreement, or have a pending Developers' Agreement. The number of units for each development were either provided by City staff or obtained from Developer Agreements. The list of planned developments is provided in Table 2-9 below and shown on Figure 2-14.

Table 2-9: Planned Residential Developments

Development Name	Proposed Number of Units	Developer Agreement Status
Heron's Glen	999	Approved & Recorded
Indigo Lakes (River Meadows)	794	Approved & Recorded
Roper Trails	75	Under Construction
Sunset Lakes Estates	134	Under Construction
Woodbury	78	Constructed
Villa Pass	351	Approved, Pending Recording
BL Investments	540	No Application
Gardens at Lake Jackson Estates (KB Homes)	60-150	No Application
Langley Property	2800	No Application

2.2.1.2 Non- Residential

The Indigo Lakes development has identified approximately 150,000 square feet of commercial development. No other commercial uses, both existing and planned, have been identified within the planning area at this time with potential of connecting to the collection system.

2.2.2 Land Use and Development

The western and northern portions of the planning area consist of mostly undesignated land, comprised of agricultural and wetlands. The middle of the planning area is made up of planned residential and mixed use, while the southeastern portion includes the existing downtown area with a mix of low-density residential, commercial, planned residential and

Dry Sewer Developments

City of Mascotte, FL

Figure 2-13

Lake Jackson Estates/Gardens

Lakeview Estates

Shearwater

Knight's Lake, Phases 1+2

CR 33

SR 50

WEST MYERS BLVD

EAST MYERS BLVD

W BROAD ST

VILLA CITY RD

BAY LAKE RD

Sumter Lake

Palatlakaha River

Moon Lake

Heart Lake

Big Bluff Lake

Dukes Lake

Lake Catherine

Lake David

0 0.25 0.5 1 Miles

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Lake Jackson Estates/Gardens
- Lakeview Estates
- Knight's Lake, Phases 1+2
- Shearwater

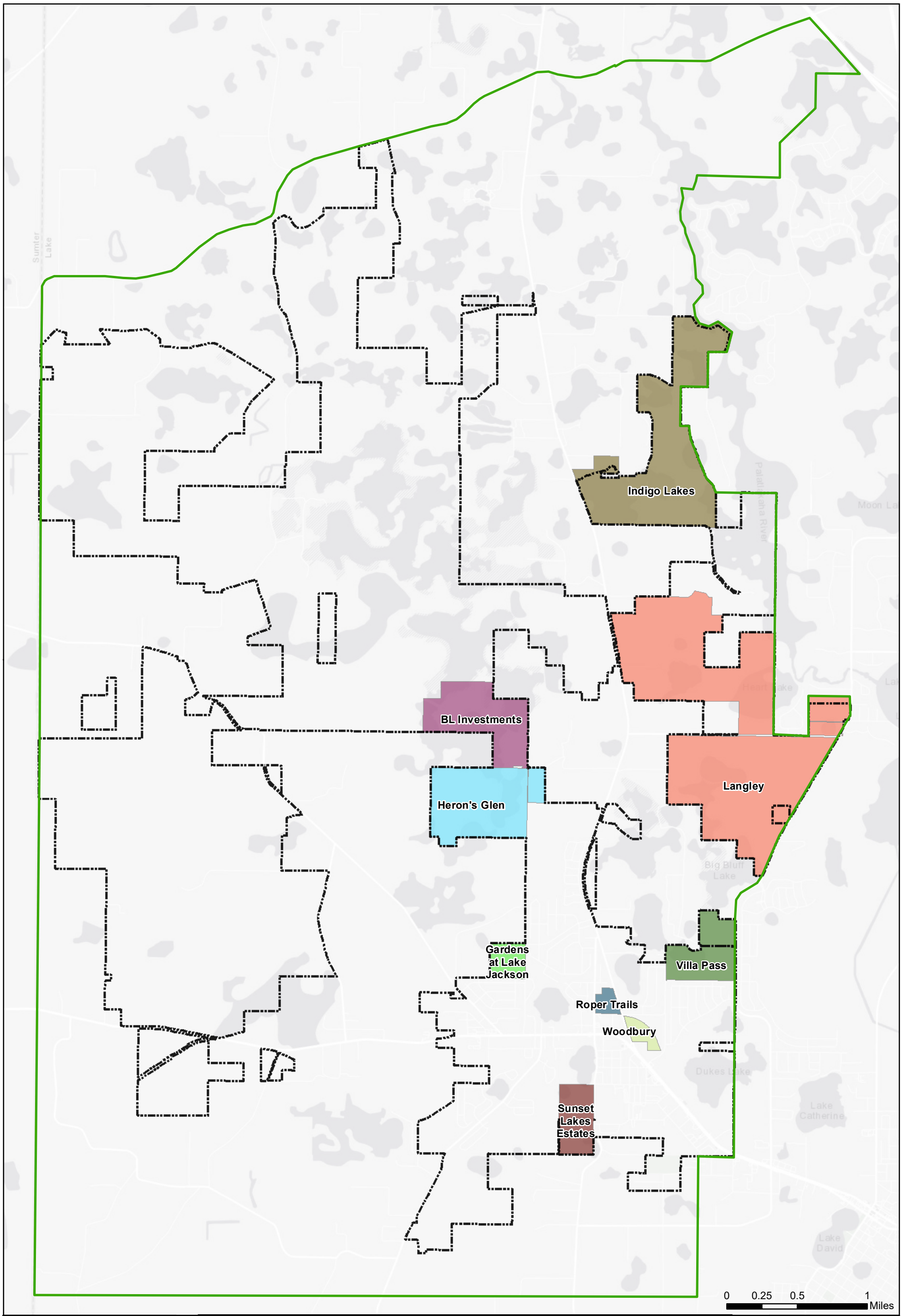
N

WOODARD &CURRAN

Project #: 0232301.03

Map Created: August 2021

Figure Exported: 8/5/2021 By: cwallitsch Using: \\woodardcurran.net\Shared\Projects\0232301.03 Mascotte CW Fclty Plan\wip\GIS\PDFs\MXDs\Figure 2-13 --Dry Sewer Developments.mxd



Planned Developments

City of Mascotte

Figure 2-14

Legend

Future Planning Area City Zoning

Mascotte City Limits

Planned Developments

- BL Investments
- Gardens at Lake Jackson
- Heron's Glen
- Indigo Lakes
- Langley
- Roper Trails
- Sunset Lakes Estates
- Villa Pass
- Woodbury

N

WOODARD &CURRAN

Project #: 0232301.03

Map Created: August 2021

mixed use. See the future land use map in Figure 2-15, as provided in the City of Mascotte's 2017 Comprehensive Plan. Residential and commercial development is expected to continue throughout the planning area.

2.3 Wastewater Collection and Treatment Facilities

2.3.1 Wastewater Collection System

2.3.1.1 Gravity Sewer and Force Main Collection System

The City owns an inactive, dry gravity collection system that serves approximately 550 homes, none of which are connected to the system. An Interlocal Agreement is in place with the City of Groveland to accept and treat up to 250,000 gpd of the City's wastewater though the current usage is approximately 1,400 gpd. The only active system in the City is approximately 6,900 linear feet (LF) of 4-inch HDPE force main associated with Lift Station #1 (Groveland Interconnect Lift Station) that runs along State Route 50 and ultimately interconnects to the Groveland wastewater system on the northwest side of the intersection of Groveland Farms Rd and State Route 33, and approximately 3,300 LF of 4-inch PVC force main from the Woodbury Lift Station.

The City also has an Interlocal Agreement for wastewater with the City of Leesburg, but there is no existing infrastructure in place connecting into the Leesburg system. Figure 2-16 provides an overview of the existing collection system.

2.3.1.2 Lift Stations

The City of Mascotte owns and operates two (2) lift stations located along or near State Road 50. These are shown in Figure 2-16 and provided below in Table 2-10. Both lift stations are duplex lift stations comprised of two submersible pumps, a wet well, a local control panel and a radio antenna for SCADA communications. Neither have backup power, but a generator hookup exists for connection to a mobile unit.

Table 2-10: Existing Lift Stations

Number	Station Name	Station Type
LS #1	Groveland Interconnect	Duplex
LS #2	Woodbury	Duplex

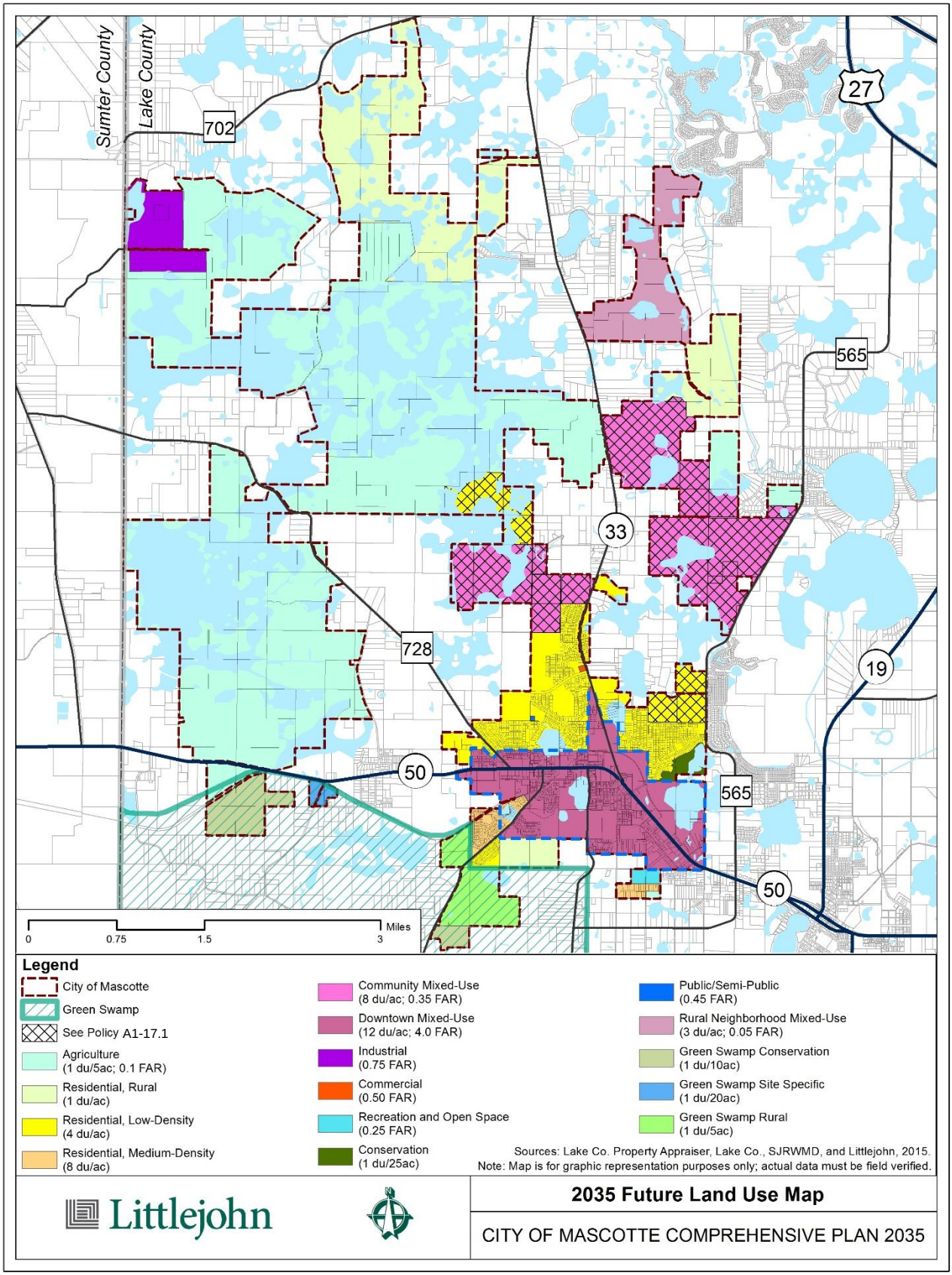
The Woodbury Lift Station collects wastewater from the Woodbury development and pumps it to the Groveland Interconnect Lift Station. The Groveland Interconnect Lift Station pumps wastewater to the City of Groveland where it is treated. Two additional lift stations at the Roper Trails and Sunset Lake developments are in construction at the time of this report.

2.3.1.3 SCADA System

The City of Mascotte currently has a proprietary SCADA system known as Data Flow Systems (DFS). However, the system is outdated, and the City has reported issues regarding reliability and malfunctions during storm events. A single computer located at the City's Knight Street Water Treatment Plant is used by operators to monitor both wastewater and potable water systems. The existing monitoring and alarming software is deployed on the same operator machine with no redundant backup system. Operators have no ability to allow secure remote access for authorized support personnel to fix minor issues.

Figure 2-15: Future Land Use

MAP A - 1: FUTURE LAND USE MAP



Existing Collection System

City of Mascotte

Figure 2-16

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groveland Interconnection
- PS — Existing Lift Station
- Existing Sanitary Sewer Force Main

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

0 0.25 0.5 1 Miles

2.3.2 Wastewater Treatment and Disposal

There are no existing wastewater treatment facilities within the City's jurisdiction. Nearly all residential and commercial developments utilize on-site septic tanks and drainfields for wastewater treatment and disposal. Septic tanks are permitted through the Lake County Health Department.

The treatment of sanitary flows is handled through the existing Interlocal Agreement with the City of Groveland.

2.4 Existing and Future Flow and Load Projections

2.4.1 Existing Wastewater Flows

2.4.1.1 Residential Sanitary Flows

There are no residential developments within the City's jurisdiction connected to the collection system, so there are no contributing residential flows.

2.4.1.2 Non-Residential Sanitary Flows

The non-residential components of total sanitary flow were determined from the water consumption records from Black Mountain Software Utility Billing and billing at the Mascotte-Groveland interconnect flow meter. There are three (3) commercial users are connected to the collection system:

- Circle K Stores, Inc.
- Fast Stop; and
- Mascotte Laundromat

The average annual sewer flow from January 2019 to December 2020 was 511,500 gallons, equivalent to 1,400 gallons per day (gpd).

2.4.1.3 Inflow and Infiltration

Infiltration is defined as extraneous flow entering the collection system through cracks and defects in the infrastructure and is typically most prevalent during the summer months in the wet weather season when the groundwater level is high. Inflow is defined as extraneous flow entering the collection system through direct connections from sources such as sump pumps, rain leaders, and stormwater drain cross-connections and is typically characterized by an increase in flow for a relatively short period of time during and immediately following a rainfall event. There are no active gravity sewers and only force mains in the system, reducing the likelihood of I/I, and the current I/I is negligible.

2.4.2 Future Wastewater Flow Projections

One of the key elements in facilities planning is to forecast conditions in the study area throughout the future planning period. The future population growth of the City was projected based on the development buildout described in Section 2.2.1 to provide a basis for estimations of future flows over a 20-year planning period. A 20-year planning period is considered a typical planning horizon relative to changes in service population and major regulatory initiatives.

Historical residential water consumption data was used to establish the base sewer flow per household. From January 2018 to December 2020, an average of 1,833 users consumed an average annual volume of nearly 143 million gallons of water. This equates to 213 gallons per day per household, or 62 gallons per capita per day (gpcd) using the estimated 3.43 people per household provided by the U.S. Census 5-year estimate from 2015-2019. To establish future flows, these values were applied to both proposed residential developments and existing developments with dry sewers. New

commercial development flows were established using an estimated 0.1 gpd per square foot. Since not all water consumed returns to the collection system, it was conservatively assumed that 90% of the water data could ultimately contribute to the future wastewater flow.

Existing developments without a dry sewer system were evaluated to see if it would be economical to replace septic systems with sewer connections. This includes decommissioning existing septic systems, connecting homes to new gravity sewers, and construction of pump stations and force mains to convey wastewater flow to a treatment plant. Parcels that are located on properties less than or equal to 1.5 acres and not within the existing sewered/dry sewer areas were evaluated and grouped into subareas based on location. These subareas are shown in Figure 2-17. In each subarea, the estimated new sewer costs were compared to the cost of maintaining the existing septic system over the 20-year planning period. Analysis showed that the cost of maintaining a septic system is far less expensive than connecting to a sewer system, as summarized in Table 2-11. Therefore, new sewers are not considered economically feasible for existing parcels within the City and were not included in future flow projections or buildout analysis.

Table 2-11: New Sewer Costs vs Maintaining Septic per Parcel

Subarea	Number of Parcels	New Sewer Cost[1]	New Sewer Cost per Parcel[2]	Septic System Maintenance Cost per Parcel[3]
Area 1	214	$7,265,500	$33,950	$12,300
Area 2	51	$3,107,200	$60,930	$12,300
Area 3	61	$3,123,000	$51,200	$12,300
Area 4	186	$5,720,800	$30,760	$12,300
Area 5	53	$2,063,400	$38,930	$12,300
Area 6	152	$5,269,600	$34,670	$12,300
Area 7	122	$3,144,000	$25,770	$12,300
Area 8	253	$6,540,400	$25,850	$12,300
Area 9	136	$4,589,600	$33,750	$12,300
Area 10	43	$2,930,000	$68,140	$12,300
Area 11	38	$2,033,700	$53,520	$12,300
Area 12	133	$5,764,400	$43,340	$12,300
Area 13	26	$3,130,900	$120,420	$12,300

Notes:
1. Costs include installation of gravity sewer, force mains, one pump station per area, decommissioning of existing septic system and wastewater treatment capital costs
2. Proposed force main lengths from each subarea were assumed to connect into the existing Groveland Lift Station
3. Costs include pump of septic system once every two years over the 20-year planning period as well as replacement/rehabilitation costs of an existing septic tank

Table 2-12 and Table 2-13 include a summary of the future flows from new development based on the anticipated 7% population growth scenario outlined in Section 2.2.1 and the existing average sewer flows for residential and commercial flows noted earlier. The additional I/I from new sewers was calculated using an estimated 250 gallons per day per inch diameter mile and assuming an average of 50 linear feet per household linear footage required to service the proposed developments.

Potential Sewer Connections

City of Mascotte

Figure 2-17

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groveland Interconnection
- Dry Sewer Developments
- PS Existing Lift Station
- Existing Sanitary Sewer Force Main
- Potential Sewer Connections
- Parcels <1.5 Acres

N

WOODARD &CURRAN

Project #: 0232301.03

Map Created: August 2021

0 0.2 0.4 0.8 Miles

Figure Exported: 8/5/2021 By: cwallitsch Using: \\woodardcurran.net\Shared\Projects\0232301.03 Mascotte CW Fcty Planning\GIS\PDFs MXDs\Figure 2-17 Septic to Sewer.mxd

Table 2-12: Estimated Future Average Annual Flows

Source	Flow	Unit
Existing Sanitary Flows	1,400	gpd
New Residential Development Within Service Area	1,126,400	gpd
New Non-residential Development Within Service Area	13,500	gpd
Existing Dry Sewer Connection	106,200	gpd
Additional I/I from New Gravity Sewers	124,000	gpd
Total	**1,370,500**	**gpd**
Total	**1.37**	**MGD**

1. Flows account for all approved and pending developments (7% Growth)

Table 2-13: Future Flows and Peaking Factors

	Peaking Factor[1]	Future Flow	Unit
Flow			
Average Annual		1.37	MGD
Peak Hourly	3.6	4.93	MGD
Maximum Month	1.5	2.06	MGD
Maximum Day	2.1	2.88	MGD
Minimum Day	0.5	0.69	MGD

1. Peaking factors established based on *TR-16 Guides for the Design of Wastewater Treatment Works, Rev. 2016*, Figure 2-1 – Relation of Extreme Discharges on Maximum and Minimum Days to the Average Daily Discharge of Domestic Sewage

2.4.3 Future Wastewater Load Projections

Since the City does not have an existing WWTP, the constituent loadings per capita were based on average annual loading range values provided by Recommended Standards for Sewage Works (Ten State Standards) and Manual of Practice No. 8. Wastewater Treatment Plant Design (MOP 8), and are provided below:

- Biological Oxygen Demand (BOD) – 0.190 lbs/capita-day
- Total Suspended Solids (TSS) – 0.210 lbs/capita-day
- Total Nitrogen (TN) – 0.035 lbs/capita-day

Using the anticipated growth outlined in Section 2.2.1, the values were translated to loadings in pounds per day, as summarized in Table 2-14, below.

Table 2-14: Estimated Future Loads

	Influent Peaking Factor[1]	Future Influent[2]	Unit
Carbonaceous Biochemical Oxygen Demand (cBOD)			
Average Annual		371	mg/l
Average Annual		4,368	lb/day
Maximum Month	1.5	6,552	lb/day
Maximum Day	2.1	9,173	lb/day
Minimum Day	0.5	2,184	lb/day
Total Suspended Solids (TSS)			
Average Annual		410	mg/l
Average Annual		4,828	lb/day
Maximum Month	1.6	7,725	lb/day
Maximum Day	2.3	11,105	lb/day
Minimum Day	0.4	1,931	lb/day
Total Nitrogen (TN)			
Average Annual		68	mg/l
Average Annual		805	lb/day
Maximum Month	1.5	1,207	lb/day
Maximum Day	2.1	1,690	lb/day
Minimum Day	0.6	483	lb/day

1. Peaking factors established based on *TR-16 Guides for the Design of Wastewater Treatment Works, Rev. 2016*, Figure 2-1 – Relation of Extreme Discharges on Maximum and Minimum Days to the Average Daily Discharge of Domestic Sewage
2. Average annual loadings based around constituent loading per capita values provided by Recommended Standards for Sewage Works (Ten State Standards), Chapter 10 Section 11.253 and MOP 8

2.5 Managerial Capacity

The City of Mascotte has the sole responsibility and authority to build, operate, and maintain the wastewater system. There are three operators on the City staff, two of which are licensed operators.

The City has an Interlocal Agreement with the City of Groveland to discharge up to 250,000 gpd of wastewater generated within its jurisdictional city limits. The City also has an interlocal agreement with the City of Leesburg to discharge up to 125,000 gpd of wastewater, but there is no existing infrastructure in place connecting into the Leesburg system. Considerations for connecting to Leesburg were not evaluated in this Facility Plan. A copy of the Interlocal Agreements is provided in Appendix B.

2.5.1 Operation and Maintenance Program

The City contracts out preventative maintenance of the Groveland Lift Station to a private firm, Utility Repair Experts (URE). Under this contract, routine monthly inspection and maintenance is provided for the lift station, followed by a detailed report recommending any necessary repairs. URE manages these repairs and any other issues that may arise at the lift station. Any repairs beyond the abilities of URE are contracted out to a third-party contractor.

3. DEVELOPMENT OF ALTERNATIVES

This section includes an evaluation of the wastewater treatment and disposal alternatives to address the identified needs and presents the viable alternatives investigated.

3.1 General

The alternatives to address the City of Mascotte's clean water system challenges require an evaluation of the existing lift station, force main, and collection system, and an evaluation of future processes for collection, treatment, and disposal for future development within the 20-year planning period.

The options identified for wastewater treatment and disposal are as follows:

1. No Action
2. Local Treatment Alternative with Land Application Disposal
3. Regional Alternative with Amended Interlocal Agreement

The options identified for SCADA upgrades are as follows:

1. No Action
2. Retrofit Existing SCADA System
3. Full SCADA System Replacement

3.2 Cost Effectiveness

The construction costs include general conditions, utility relocation and contractor mobilization, bonds, insurance, overhead, and profit. A construction contingency of 10% is included. Capital costs were determined by the quotes received from the suppliers/manufacturers, in addition to estimates for excavation, concrete tanks, buildings, and other necessary equipment and processes. Costs assume the existing soils have sufficient structural bearing capacity to not require piles for supporting new structures such as buildings and tanks.

For major process equipment items or systems, equipment costs used were obtained from vendor estimates or project experience with similar projects. A factor of 40% was added to estimate the installation cost, this includes hardware and other miscellaneous items such as equipment pads, anchor bolts and other required items not explicitly itemized or estimated.

The expected level of accuracy of the cost estimates presented in this Facilities Plan is Class 4 in accordance with the Association for the Advancement of Cost Engineering International (AACEI). The expected accuracy for Class 4 estimates and the cost estimate presented in this report are within (20-40 percent) over the estimate to (20-30 percent) under the estimate. This is appropriate with a conceptual evaluation such as this Facilities Plan.

The life cycle cost analysis (LCCA) is the basis for comparison of the various alternatives developed in this Facilities Plan. The LCCAs and are included in Sections 3.3.5 and 3.4.5. The LCCA for the viable alternatives incorporated the following considerations:

1. Planning period of 20 years.
2. A discount rate of 1.5% was used in this analysis.
3. Capital costs including but not limited to, land acquisition, construction, contingency, engineering, legal, fiscal, and administrative costs.

4. The annual O&M costs are based on estimated electricity and chemical usage for each alternative and assumed other O&M costs such as labor, sludge and equipment maintenance were developed. Cost estimates were based on average flow conditions. Electricity costs were based on a unit cost of $0.13 per kilowatt-hour. The number of equipment units operating under average conditions was estimated, and average run time was approximated in order to develop an average annual electricity cost.
5. Salvage values based on appropriate useful lives of various project components.
6. Capital costs are based on recent bids and information provided by sales representatives/consultants in the area.

The project cost and effectiveness certification and water/energy certification are provided in Appendix C.

3.3 Evaluation of Wastewater Treatment and Disposal Alternatives

3.3.1 Alternative 1 – No Action

Under this alternative, no additional collection and/or treatment capacity will be added to accommodate the projected future flows and loads. The projected flows from future developments will require an extensive collection system and the flows will surpass the 250,000 gpd agreement with the City of Groveland and not offer any environmental improvements, thus this option is not viable and hence was rejected.

3.3.2 Alternative 2 – Local Treatment Alternative with Land Application Disposal

Alternative 2 includes collection, treatment, and disposal components. Under this alternative, a local wastewater treatment plant (WWTP) will be constructed in the City of Mascotte, along with an associated collection system and lift stations to convey all flow within the City to the proposed WWTP. Treated effluent would be returned to the environment via groundwater discharge. The following is a brief overview of each component of this alternative.

3.3.2.1 Collection and Transmission System

This alternative will include upgrades to existing sewer infrastructure and the existing lift station as well as installation of new sewer infrastructure and lift stations to connect to existing dry sewer and accommodate proposed developments. In areas where developments abut one another, it was assumed that the developments would share a common lift station. The installation of collection systems *within* the new developments was not included in this analysis. It is assumed the developers will be responsible for the systems within the new developments. Flows from the new lift stations will be collected and conveyed via new force mains to the proposed WWTP for treatment.

To limit the size of the pumps and potential total dynamic head, lift stations were placed at a maximum of every two miles along a force main. A total of nine (9) new lift stations are proposed as part of this alternative, in addition to upgrades at the existing Groveland lift station, with approximate 9.5 miles of new force main. It was assumed that land acquisition for the lift station locations and costs associated with land acquisition is required for this alternative. The existing force main interconnecting with the City of Groveland will be abandoned.

Estimated flows at each lift station is presented in Table 3-4.

Table 3-1: Proposed Lift Stations

Proposed Lift Station ID	Developments and Lift Stations Served	Estimated Peak Flow (GPM)[1]
Groveland Lift Station (LS 1)	Lift Stations 2, 3, 4, and 10	3,660
LS 2	Woodbury	60
LS 3	Roper Trails	50
LS 4	Sunset Lakes	100
LS 5	Indigo Lakes	550
LS 6	Langley	1,570
LS 7	Heron's Glen and BL Investments	1,060
LS 8	Lift Station 5, 6 and 7	3,180
LS 9	Gardens at Lake Jackson	80
LS 10	Lake Jackson Estates, Lakeview and Lift Station 8 and 9	3,450
LS 11	Villa Pass	260
LS 12	Shearwater and Knights Lake	220
LS 13	Lift Stations 1 and 12	3,880

Notes:

1. Peak flows were based on peaking factors from *TR-16 Guides for the Design of Wastewater Treatment Works, Rev. 2016,* Figure 2-1 – Relation of Extreme Discharges on Maximum and Minimum Days to the Average Daily Discharge of Domestic Sewage.

Figure 3-1 shows the conceptual layout of the proposed pump stations and force mains associated with this alternative as well as the proposed WWTP location. Further information about WWTP siting and technology is discussed in Section 3.3.2.2.

3.3.2.2 Treatment

Treatment for this alternative will be accomplished with a local WWTP within Mascotte's jurisdiction. Package treatment plants were evaluated as the treatment technology for this alternative because the pre-fabricated plants are compact with small footprint, cost effective, simple to implement and best suited for small flow scenarios.

Package treatment plants are engineered and manufactured plants by equipment suppliers and are an alternative to the larger, custom designed secondary treatment technologies such as sequencing batch reactors (SBRs), oxidation ditches, or membrane bioreactors (MBRs). Equipment suppliers have standard designs, with certain customizations to meet the treatment requirements of the discharge permit(s). Package plants can typically be designed, constructed, and commissioned in less time than custom-designed systems. Package plants are best suited for small flow scenarios, often designed to treat flows less than or equal to 0.25 MGD but can treat flows up to 1 MGD. In this alternative, two (2) 1.05 MGD above ground 4-stage BNR (Biological Nutrient Removal), 167-foot diameter, package plants running in

Alternate 2
Local Treatment
Figure 3-1
WWTF, LS & Force Main Locations

City of Mascotte, FL

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Planned Developments
- Dry Sewer Developments
- Proposed WWTF Location
- Proposed Lift Stations
- LS Under Construction
- Existing Lift Station
- Existing Force Main
- FM to LS 1
- FM to LS 13
- FM to LS 8
- FM to WWTF
- FM to LS 10

0 0.25 0.5 1 Miles

N

WOODARD &CURRAN

Project #: 0232301.03

Map Created: August 2021

parallel are proposed to handle the future wastewater flows. Figure 3-2 shows the proposed package plant configuration. Table 3-2 provides the design summary values. Each package plant contains the following components:

- Influent equalization tank
- Two (2) pre-anoxic zones
- Aeration zone
- Post-anoxic zone
- Re-aeration zone
- Secondary clarifier
- Chlorine contact tank
- Aerobic Digester

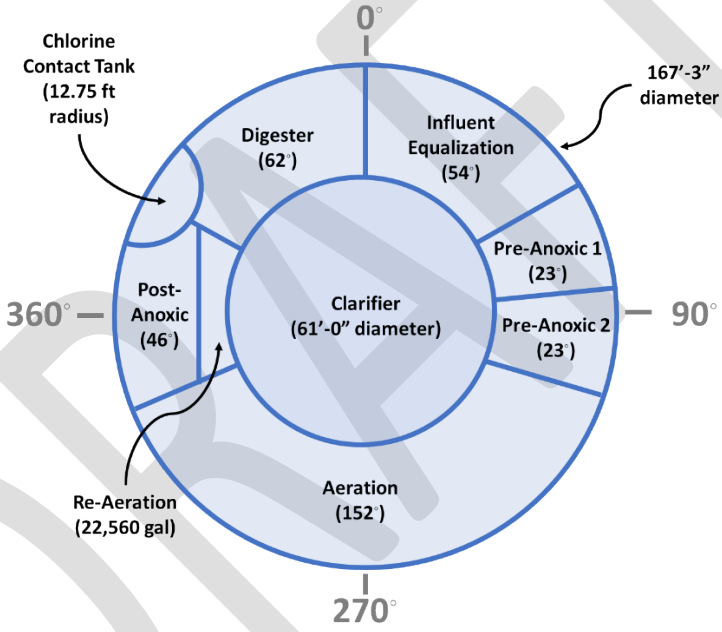


Figure 3-2: Package Plant Proposed Configuration

Table 3-2: Package Plant Design Basis Summary

Flow	
Total Design Flow, each (MGD),	1.05
Total Peak Flow, each (MGD)	2.52
Estimated Influent Loading	
BOD (mg/L)	374
TSS (mg/L)	441
NH3-N (mg/L)	51
TKN (mg/L)	69
TP (mg/L)	7
Influent Equalization	
Total EQ Volume (gal)	349,838
Total Equalization HRT @ average daily flow (hours)	8
Pre-Anoxic Basin	
Total Pre-Anoxic Volume (gal)	345,881
Pre-Anoxic HRT @ average daily flow (hours)	7.9
Aeration Basin	
Total Aeration Volume (gal)	1,142,910
Aerobic SRT (days)	12.1
Aerobic HRT (hours)	26.1
BOD Loading (lbs BOD/1000 cf/day)	21.4
Aerobic F/M (lbs BOD/lbs MLVSS)	0.131
AOR (lbs O_2 per day)	5,778
SOR (lbs O_2 per day)	15,040
Post-Anoxic Basin	
Total Post-Anoxic Volume (gal)	323,323
Post-Anoxic HRT @ average daily flow (hours)	7.39
Re-Aeration Basin	
Total Re-Aeration Volume (gal)	1,142,910
Re-Aeration HRT (hours)	0.516
Secondary Clarifier	
Clarifier Diameter (feet)	61.0
Total Clarifier Volume (gal)	351,188
Surface Overflow Rate (average gpd/ft^2)	359
Chlorine Contact Tank	
CL Contract HRT (minutes at peak flow)	*18.5*
Aerobic Digester	
Total Digester Volume	443,629
Digester SRT (days)	29.5

In addition to the package plant, it was assumed that the local treatment plant would include the following additional equipment and processes:

- Headworks, including fine screens and washer compactors
- Process blowers for aeration tanks, aerobic digester and equalization tanks
- Plant water system
- Final effluent pump system
- Sludge dewatering system
- Effluent storage tanks to store effluent wastewater before discharge to effluent disposal location or reject/ return to headworks for retreatment if it doesn't meet permit requirements for land application disposal
- Emergency generator
- Operations Building, assumed to contain offices, locker rooms and showers, conference room space, process blowers room, and a laboratory.
- Chemical Building to house chemical feed systems including:
    - Polymer feed system for sludge dewatering;
    - Sodium Hypochlorite feed system for chlorine disinfection;
    - Coagulant feed system for improved settling and enhanced TSS and phosphorus removal; and
    - Carbon Addition for enhanced nitrogen removal

The proposed effluent parameters of the plant are shown in Table 3-3.

Table 3-3: Proposed Effluent Limits for WWTP

Parameter	Unit	Monthly Average Limit
BOD_5	mg/L	≤ 10
TSS	mg/L	≤ 10
Ammonia	mg/L	≤ 1
TN	mg/L	≤ 10

3.3.2.2.1 WWTP Siting

Several locations were evaluated as potential WWTP sites within the City. Four different criteria were evaluated to establish the best possible locations. These criteria are listed below:

1. Site land use and size: An undeveloped, vacant site is desirable because of the site preparation costs, with fewer potential infrastructure conflicts to be resolved than a currently occupied site or previously developed non-residential site. The parcel size will contribute to the ability to construct land application methods for effluent disposal.

2. Proximity to existing users: A central location will minimize the size of the collection system required to convey flow to the new plant, but should also provide a suitable buffer area from nearby property owners to limit the potential for odors and noise intrusion.

3. Natural Resources: Sites within specially designated natural resource areas were avoided as much as possible. The development of areas designated as wild, scenic, recreational, or habitats of endangered species may be prohibited, or at minimum, result in complicated permitting processes. In addition, the presence of a sensitive feature, such as a wetland, would affect site suitability.

4. Soil Drainage Class: Effluent disposal for the treatment plant will be via land application. Sites with soils with better drainage will provide optimal locations for disposal without requiring long lengths of force main to connect to a disposal site on a different piece of land.

Based on the presented criteria, four (4) different sites were selected for further evaluation. Site 1 is comprised of two parcels in the western part of the City, totaling 68 acres, made up of mostly well-drained soils, Site 2 is approximately 29 acres, has excessively drained soils, but also contains some wetlands. Site 3 is about 109 acres, but about half of it is wetlands, while the other half is excessively drained soils. This site is the furthest south and is less central than other locations. Site 4 is nearly 40 acres with either excessively drained or well drained soils. However, this site abuts two existing developments. The location of each site is provided in Figure 3-3.

Site 1 was selected as the ideal location for planning purposes and cost estimate development because the site is undeveloped, its general central location and additional buffer area from existing properties, no existing wetlands or sensitive features, and good soil drainage for disposal. Actual siting shall be determined during design if this alternative were to be selected.

3.3.2.3 Disposal

Disposal of treated effluent will be accomplished by applying wastewater to shallow basins, commonly referred to as Rapid Infiltration Basins (RIBs) or Soil Aquifer Treatment (SAT). The RIB process is simple and easy to operate and maintain, widely used and can treat a much larger volume of wastewater on a much smaller land area than other land treatment processes. Another advantage to this disposal method is that no chemicals are required, and the gravity distribution methods are energy efficient because they do not require power to operate. The process is very reliable with sufficient resting periods. Typically, operations range from 1-7 days of hydraulic loading, with resting periods of 5-14 days to dry the cell bottoms and allow for scarification or removal of deposited solids.

RIBs were conceptually sized using average annual hydraulic loading rates of 3 inches per day, where hydrogeologically feasible, as per Florida Administrative Code Rule 62-610.523 (3).

Solids handling will include dewatering and disposal. Sludge dewatering will be used to reduce volume of sludge and minimize hauling costs. The processed solids are expected to be removed and hauled offsite by a private contractor at cost per wet ton.

3.3.3 Alternative 3 – Regional Treatment Alternative with Amended Interlocal Agreement

Alternative 3 also includes collection, treatment and disposal components. Under this alternative, Mascotte would continue to utilize the City of Groveland as a regional wastewater treatment and disposal provider. A new collection system and additional lift stations will be required within the City to convey flow from the proposed developments to the system interconnects. The following is a brief overview of each component of this alternative:

3.3.3.1 Collection and Transmission System

Similar to Alternative 2, collection for this alternative will include upgrades to existing sewer infrastructure and the existing Groveland lift station, and installation of new sewer infrastructure and lift stations to connect to existing dry sewer and accommodate proposed developments. In areas where developments abut one another, it was assumed that the developments would share a common lift station. The installation of collection systems *within* the new developments was not included in this analysis. Flows from the new lift stations will be collected and conveyed via force mains to Groveland for treatment. This includes flows through the existing force main and interconnect as well

Proposed WWTP Locations

Figure 3-3
Page 1 of 4

City of Mascotte, FL

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Planned Developments
- Dry Sewer Developments
- Potential WWTP Sites
- Wetlands

Soil Drainage Class

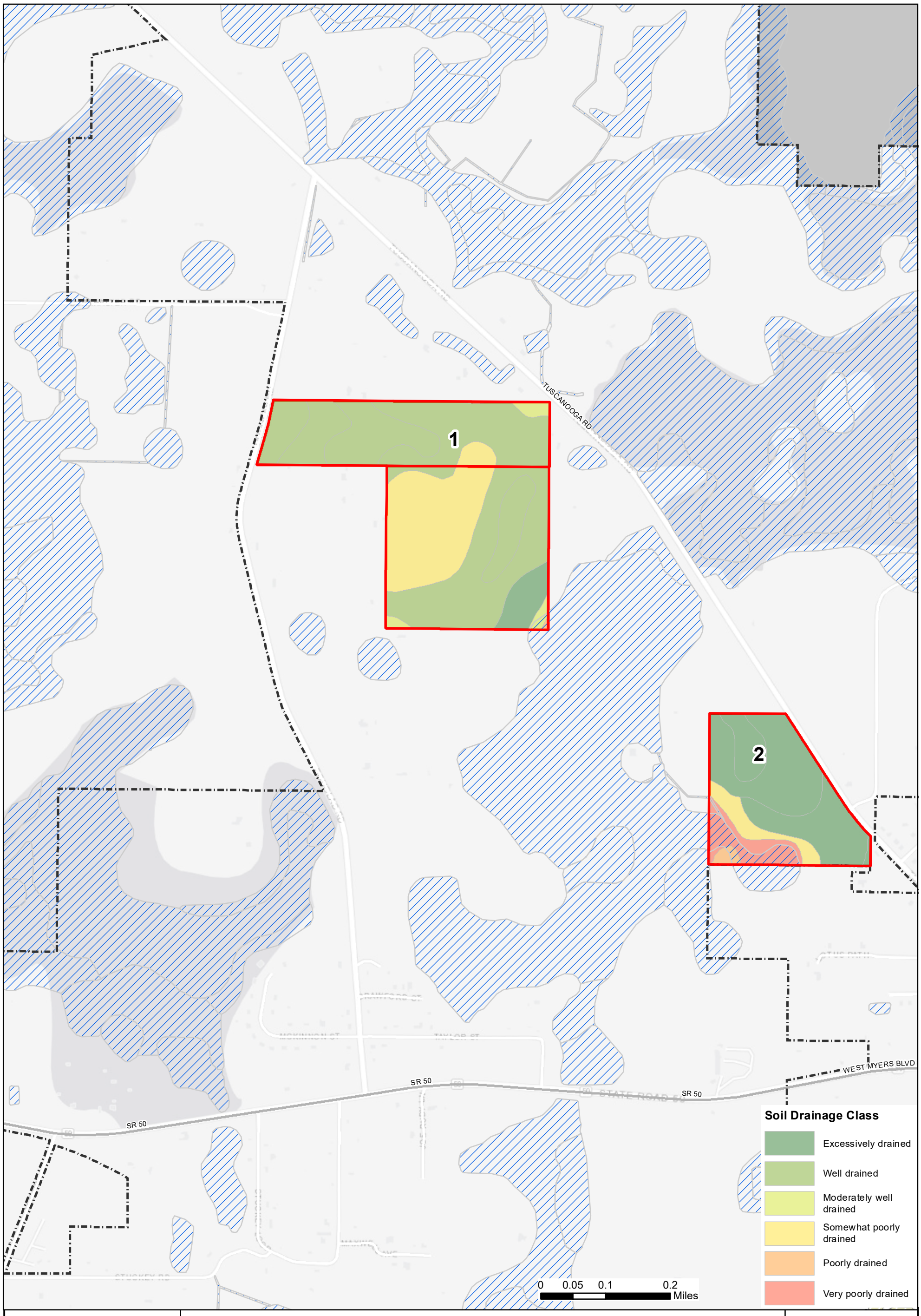
- Excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained

0 0.25 0.5 1 Miles

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021



Proposed WWTP Locations

Figure 3-3
Page 2 of 4

City of Mascotte, FL

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Planned Developments
- Dry Sewer Developments
- Potential WWTP Sites
- Wetlands

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

Proposed WWTP Locations

Figure 3-3
Page 3 of 4

City of Mascotte, FL

CR 33

4

0 0.05 0.1 0.2 Miles

Soil Drainage Class

- Excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Planned Developments
- Dry Sewer Developments
- Potential WWTP Sites
- Wetlands

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

BAY LAKE RD

BAY LAKE RD

BAY LAKE RD

3

0 0.05 0.1 0.2 Miles

Soil Drainage Class

- Excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained

Proposed WWTP Locations

Figure 3-3
Page 4 of 4

City of Mascotte, FL

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Planned Developments
- Dry Sewer Developments
- Potential WWTP Sites
- Wetlands

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

as flow through a proposed forcemain and interconnect for the City's northern developments to send to the new proposed WWTP in Groveland.

To limit the size of the pumps and potential total dynamic head to overcome, lift stations were placed at a maximum of every two miles along a force main. A total of eight (8) new lift stations are proposed as part of this alternative, in addition to upgrades at the existing Groveland Lift Station, with an associated 10 miles of new force main. It was assumed that land acquisition for the lift station locations and costs associated with land acquisition is required for this alternative. Estimated flows at each lift station is presented in Table 3-4.

Table 3-4: Proposed Lift Stations

Proposed Lift Station ID	Developments and Lift Stations Served	Estimated Peak Flow (GPM)[1]
Groveland Lift Station (LS 1)	Lift Stations 2, 3, 4, 10, 11 and 12	950
LS 2	Woodbury	60
LS 3	Roper Trails	50
LS 4	Sunset Lakes	100
LS 5	Indigo Lakes	550
LS 6	Heron's Glen and BL Investments	1,060
LS 7	Lift Station 5 and 6	1,610
LS 8 (Master LS)	Langley and Lift Station 7	3,180
LS 9	Gardens at Lake Jackson	80
LS 10	Lake Jackson Estates, Lakeview and Lift Station 9	260
LS 11	Villa Pass	260
LS 12	Shearwater and Knights Lake	220

Notes:
1. Peak flows were based on peaking factors from *TR-16 Guides for the Design of Wastewater Treatment Works, Rev. 2016,* Figure 2-1 – Relation of Extreme Discharges on Maximum and Minimum Days to the Average Daily Discharge of Domestic Sewage.

The wastewater flows will be delivered to the City of Groveland at two interconnections, the existing interconnect to connect to Sampey WWTP in Groveland and a new interconnect at the proposed Lift Station 8 on the eastern boundary of the City to connect to the proposed WWTP in Villa City, Groveland. Figure 3-4 shows the proposed pump stations and force mains associated with this alternative. Due to the projected increased flows at the Groveland Lift Station, it is expected that the downstream force main will require upsizing. Costs for the upsizing of this force main were only accounted for within the City boundary and do not include any upsizing necessary outside the City jurisdiction.

3.3.3.2 Regional Treatment and Disposal Alternative

Treatment and disposal for this alternative will be accomplished through an Interlocal Agreement with the City of Groveland. The City currently has an agreement with the City of Groveland to accept and treat up to 250,000 gpd of wastewater generated within its jurisdictional city limits. The WWTP on Sampey Road in Groveland receives all current flows from the City. Sampey Road WWTP has a National Pollution Discharge Elimination System (NPDES) permit for treated effluent discharge to either a reuse system which consists of 2.5 million gallons offsite wet weather storage tanks and a slow-rate public access system or to a slow-rate restricted access reuse site in the form of a sprayfield. Due to the limited capacity of Sampey Road WWTP and the projected future wastewater flows, this alternative assumes approximately 0.27 MGD will flow to Sampey and 1.1 MGD of the anticipated flows in Mascotte will be sent to a new WWTP, expected to be located in the northwestern part of Groveland, adjacent to the proposed Villa City Development. This treatment plant is expected to include biological treatment, clarification, disinfection, sludge digestion and

Alternative 3 Proposed Collection System Upgrades

City of Mascotte

Figure 3-4

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Planned Development
- Dry Sewer Development
- Groveland Interconnection
- Proposed Groveland Interconnection
- Existing Lift Station
- Existing Force Main
- LS Under Construction
- Proposed LS
- FM in Design
- FM to LS 1
- FM to LS 7
- FM to LS 8
- FM to LS 10
- FM to new Groveland WWTP

N

0 0.25 0.5 1 Miles

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources: Lake County GIS**

Figure Exported: 8/5/2021 By: cwallitsch Using: \\woodardcurran.net\Shared\Projects\0232301.03 Mascotte CW Fclty Plan\wip\GIS\PDFs\MXDs\Figure 3-4 - Alt 3 Proposed Collection System Upgrades.mxd

dewatering, as well as disposal. An amended interlocal agreement will be required and is evaluated as part of this alternative in the following section.

3.3.3.2.1 Amended Interlocal Agreement

The projected future flows from Mascotte are in exceedance of the 250,000 gpd of agreement between the City of Mascotte and the City of Groveland and will require amendment. This amendment is expected to include a revision of the existing agreement to increase the quantity of accepted flows at two interconnects, shown in Figure 3-4, with the understanding that a majority of these flows will be directed to a new WWTP in Groveland. This amendment is expected to include the following changes and updates:

- Existing interconnection: flow will increase from 0.25 MGD to 0.28 MGD to accommodate for connection of the dry sewered developments and new approved developments.
- New proposed interconnection: A second interconnection point will send flows to the new proposed Groveland WWTP that would handle the northern developments and an approximate flow of 1.1 MGD.
- The current rate that the City of Groveland charges the City of Mascotte is $2.63 per 1,000 gallons. At the time of this report, a draft of a new interlocal agreement had been initiated, proposing a future rate of $3.83 per 1,000 gallons. This number will need to be discussed and finalized by both Cities. This assumed future rate is used to cover the annual O&M for both the Groveland WWTPs.

Typically, the cost of such capital upgrades to build a future WWTP would be spread out to all the users based on the flow allocations from each community. Therefore, it is expected that the City of Mascotte will be proportionally sharing the cost of upgrades to the existing Sampey WWTP and construction of a new WWTP. Since the City of Mascotte is not using the allotted 250,000 gpd in the agreement that goes to the Sampey WWTP, it is expected that the users connecting into the Sampey collection system will absorb some of the costs of the planned Sampey upgrade to accommodate future growth. The City of Groveland is currently developing a master plan that will incorporate the construction of the new WWTP in Groveland. However, a capital plan for this plant has not been finalized at this time.

This facilities plan includes a conservative allowance for capital upgrade costs of the regional treatment plant for planning purposes since the construction cost is a future capital cost that is yet to be determined. It is assumed that the City buy-in fee from Groveland will be based on EDUs and will be negotiated through discussions between the two cities' governing authorities. The estimated sharing cost for regional treatment and disposal at the future regional plant is presented in Table 3-5.

Table 3-5: Estimated Sharing Cost for Regional Treatment and Disposal

Description	Estimated Cost
Groveland Buy-in[1]	$24,016,000

1. Based on an assumed $3,735 per EDU per the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.

3.3.4 Alternatives Cost Comparison

A cost comparison of each alternative is presented in Table 3-6. The cost estimates shown, and any resulting conclusions on project financial or economic feasibility or funding requirements, have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final costs of the project and resulting feasibility will depend on actual labor and material costs, competitive market conditions, actual site

conditions, final project scope, implementation schedule, continuity of personnel and engineering, and other variable factors. As a result, the final project costs will vary from estimates presented here.

Table 3-6: Wastewater Treatment and Disposal Comparative Costs

Item No.	Cost Item	Alternative 2 - Local Treatment and Disposal	Alternative 3 - Regional Treatment and Disposal
1	**CAPITAL COST SUMMARY**		
1.1	*Collection System*		
1.1.1	Force Mains	$16,170,000	$17,978,000
1.1.2	Lift Stations	$11,028,000	$6,384,000
1.1.3	*Total Collection System Cost*	*$27,198,000*	*$24,362,000*
1.2	Treatment	$31,399,000	$24,016,000[1]
1.3	Disposal	$3,949,000	
1.4	**CAPITAL BASE COST**	**$62,546,000**	**$48,378,000**
1.5	Contingency (10%)	$6,255,000	$2,436,000
1.6	Engineering (18%)	$12,384,000	$4,824,000
1.7	Legal, Fiscal and Administrative (3%)	$2,064,000	$804,000
1.8	**TOTAL CAPITAL COST**	**$83,249,000**	**$56,442,000**
2	**O&M COST SUMMARY**		
2.1	*Collection System*		
2.1.1	Electrical[2]	$150,000	$68,000
2.1.2	Chemical	$12,000	$10,000
2.1.3	Operation[3]	$20,000	$19,000
2.1.4	Maintenance	$36,000	$29,000
2.2	*Treatment and Disposal System*		
2.2.1	Electrical[2]	$492,000	$0
2.2.2	Chemicals	$79,000	$0
2.2.3	Sludge Hauling & Disposal	$167,000	$0
2.2.4	Operation	$53,000	$0
2.2.5	Maintenance	$107,000	$0
2.2.6	Mascotte Annual Connection Fees w/ Groveland for Treatment & Disposal @ Sampey and new Groveland WWTP[3]	$0	$1,916,000
2.3	**TOTAL ANNUAL O&M COST**	**$1,116,000**	**$2,042,000**
2.4	**TOTAL LIFE CYCLE COST ANALYSIS[4]**	**$96,863,000**	**$86,321,000**

1. Treatment costs for Alternative 3 – Regional Treatment and Disposal represent the City buy-in fee, based on a set price, estimated to be $3,735 per EDU, based on the 2019 City of Groveland wastewater impact fee. All EDUs that will be contributing flow to Groveland, either from dry sewered or new developments, are included in this cost. The $3,735 number is a loaded cost that includes general conditions, contingency, engineering and legal and administrative services, so these costs will not be seen in the line items 1.5, 1.6 and 1.7 for the treatment and disposal costs.
2. Electricity costs are based on a unit cost of $0.13 per kilowatt-hour.
3. Operations cost for Alternative 3 – Regional Treatment and Disposal includes estimated annual fee to send flow to Groveland for treatment, based on a $3.83 per 1,000 gallon rate. It is expected that this rate will be negotiated between the cities of Mascotte and Groveland at a later date.
4. Detailed Life Cycle Cost Analysis provided in Section 3.3.5.

3.3.5 Life Cycle Cost Analysis

Table 3-7 and Table 3-8 provide the 20-year life cycle cost analysis for the two proposed alternatives. The analysis is important for comparing the alternatives on an equivalent basis over the project life. Average service lives were established based on values provided in Florida Administrative Code Rule 25-30.140(2)(a), assuming a Class C, small utility.

Table 3-7: Alternative 2 – Local Treatment Life Cycle Cost Analysis

No.	Description	Construction Capital Cost	Expected Life	Years Remaining	Salvage Value (S)	Replacement Cost (R)	Annual O&M (O&M)	Life Cycle Cost (LCCA)
1	*Collection System*							
1.1	Force Mains	$21,522,000	27	7	$5,580,000	$0	$20,000	$17,722,000
1.2	Lift Stations	$14,678,000	22	2	$1,334,000	$0	$198,000	$17,087,000
2	*Treatment*							
2.1	Excavation/Backfill	$268,000	20	0	$0	$0	$0	$268,000
2.2	Concrete	$7,997,000	37	17	$3,674,000	$0	$0	$5,269,000
2.3	Process Piping	$4,371,000	35	15	$1,873,000	$0	$0	$2,980,000
2.4	Buildings	$1,985,000	15	-5	$0	$662,000	$0	$2,477,000
2.5	Treatment Equipment	$23,917,000	15	-5	$0	$7,972,000	$898,000	$45,253,000
2.6	Site / Miscellaneous	$3,254,000	35	15	$1,395,000	$0	$0	$2,218,000
2.7	WWTF Connection Fee	$0	20	0	$0	$0	$0	$0
3	*Disposal (Groveland WWTP)*							
3.1	Excavation/Backfill	$25,000	20	0	$0	$0	$0	$25,000
3.2	Concrete	$52,000	37	17	$24,000	$0	$0	$34,000
3.3	Process Piping	$2,151,000	35	15	$922,000	$0	$0	$1,466,000
3.4	Site / Miscellaneous	$3,028,000	35	15	$1,298,000	$0	$0	$2,064,000
4	**Total:**	**$83,248,000**			**$16,100,000**	**$8,634,000**	**$1,116,000**	**$96,863,000**

Table 3-8: Alternative 3 – Regional Treatment Life Cycle Cost Analysis

No.	Description	Construction Capital Cost	Expected Life	Years Remaining	Salvage Value (S)	Replacement Cost (R)	Annual O&M (O&M)	Life Cycle Cost (LCCA)
1	*Collection System*							
1.1	Force Mains	$23,929,000	27	7	$6,204,000	$0	$19,000	$19,649,000
1.2	Lift Stations	$8,497,000	22	2	$772,000	$0	$107,000	$9,761,000
2	*Treatment*							
2.1	Excavation/Backfill	$0	20	0	$0	$0	$0	$0
2.2	Concrete	$0	37	17	$0	$0	$0	$0
2.3	Process Piping	$0	35	15	$0	$0	$0	$0
2.4	Buildings	$0	15	-5	$0	$0	$0	$0
2.5	Treatment Equipment	$0	15	-5	$0	$0	$0	$0
2.6	Site / Miscellaneous	$0	35	15	$0	$0	$0	$0
2.7	WWTF Connection Fee	$24,016,000	20	0	$0	$0	$1,916,000	$56,911,000
3	*Disposal (Groveland WWTP)*							
3.1	Excavation/Backfill	$0	20	0	$0	$0	$0	$0
3.2	Concrete	$0	37	17	$0	$0	$0	$0
3.3	Process Piping	$0	35	15	$0	$0	$0	$0
3.4	Site / Miscellaneous	$0	35	15	$0	$0	$0	$0
4	**Total:**	**$56,442,000**			**$6,976,000**	**$0**	**$2,042,000**	**$86,321,000**

3.3.6 Recommended Alternative

Alternative 3 – Regional Treatment and Amended Local Agreement is the recommended alternative. Based on the life cycle cost analysis, Alternative 3 is the most cost-effective option that provides collection system upgrades and reliable treatment and disposal. Despite the anticipated buy-in costs associated with the Regional Treatment Alternative, the capital cost projection is lower than the Local Treatment Alternative. Conversely, the Regional Treatment Alternative had double the O&M costs, due to the large quantity of flow that is projected to be sent to Groveland and the annual fee associated with that flow. Regardless, the significant difference in capital costs made the Regional Treatment Alternative the most cost-effective option.

3.4 Evaluation of SCADA Upgrade Alternatives

3.4.1 Alternative 1 – No Action

Under this alternative, there would be no rehabilitation or replacement of the aging and unreliable existing SCADA system. The existing SCADA system consists of a proprietary control system and software. Additions or modifications to the system can only be done by a single solution provider, limiting the ability to get competitive bids and pricing on equipment and services. The existing system will not be easily programmed to work with other technologies such as an asset management system, automated reporting packages or alarm notification systems. Some equipment failures have already occurred to the existing system and have been addressed by the provider. System failures will increase in frequency and severity as the system ages. A major system failure increases the risk to the utility and residents.

3.4.2 Alternative 2 – Retrofit Existing SCADA System

This alternative consists of adding SCADA remote control panels to existing lift stations. The control panel will meet the City's current specifications and use a standard lift station control panel design. The panel will interconnect wiring with the motor control panel at the station to allow for remote control and monitoring.

The alternative also includes implementing a Licensed Frequency point to multiport radio system to connect communications at the lift station and future lift stations to a central master location.

3.4.3 Alternative 3 – Full SCADA System Replacement

This alternative consists of adding remote terminal units (RTUs) to the existing SCADA panels at both the Groveland Interconnect and Woodbury lift stations. It also includes replacing the motor control panel, instruments and flow meter at the existing Groveland Interconnect. Since the Woodbury lift station is a relatively new station, it does not require a new motor control panel or equipment.

3.4.4 Alternatives Cost Comparison

A cost comparison of each alternative is presented in Table 3-9. The cost estimates shown, and any resulting conclusions on project financial or economic feasibility or funding requirements, have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final costs of the project and resulting feasibility will depend on actual labor and material costs, competitive market conditions, actual site conditions, final project scope, implementation schedule, continuity of personnel and engineering, and other variable factors. As a result, the final project costs will vary from the estimates presented here.

Table 3-9: SCADA System Evaluation Comparative Costs

Item No.	Cost Item		Alternative 2- System Retrofit	Alternative 3 - System Replacement
1	**CAPITAL COST SUMMARY**			
1.1	**SCADA SYSTEM**			
1.1.1	RTU Panel Replacement		$37,000	$37,000
1.1.2	Motor Starter Control Panel Replacement		$0	$42,000
1.1.3	Transducer		$0	$4,000
1.1.4	Floats		$0	$2,000
1.1.5	Flow Meter		$0	$5,000
1.2	**CAPITAL BASE COST**		**$37,000**	**$90,000**
1.3	Contingency	10%	$4,000	$9,000
1.4	Engineering[1]	18%	$7,000	$18,000
1.5	Legal, Fiscal and Administrative	3%	$1,000	$3,000
1.6	**TOTAL CAPITAL COST**		**$49,000**	**$120,000**
2	**O&M COST SUMMARY**			
2.1	**SCADA SYSTEM**			
2.1.1	*Operation & Maintenance*		*$1,000*	*$1,000*
2.1.2	*Maintenance*		*$1,000*	*$1,000*
2.2	**TOTAL ANNUAL O&M COST**		**$2,000**	**$2,000**
2.3	**TOTAL LIFE CYCLE COST ANALYSIS[2]**		**$120,000**	**$243,000**

1. Engineering and Inspection costs for SCADA upgrades include costs for construction and implementation.
2. Detailed Life Cycle Cost Analysis provided in Section 3.4.5.

3.4.5 Life Cycle Cost Analysis

Table 3-10 and Table 3-11 provide the 20-year life cycle cost analysis for the two proposed alternatives. The analysis is important for comparing the alternatives on an equivalent basis over the project life. Average service lives were established based on values provided in Florida Administrative Code Rule 25-30.140(2)(a), assuming a Class C, small utility.

Table 3-10: Alternative 2 – Retrofit Existing System Life Cycle Cost Analysis

No.	Description	Construction Capital Cost	Expected Life	Years Remaining	Salvage Value (S)	Replacement Cost (R)	Annual O&M (O&M)	Life Cycle Cost (LCCA)
1	SCADA Communications Equipment	$49,000	10	-10	$0	$49,000	$2,000	$120,000
2	**Total:**	**$49,000**			**$0**	**$49,000**	**$2,000**	**$120,000**

Table 3-11: Alternative 3 – Replace Existing System Life Cycle Cost Analysis

No.	Description	Construction Capital Cost	Expected Life	Years Remaining	Salvage Value (S)	Replacement Cost (R)	Annual O&M (O&M)	Life Cycle Cost (LCCA)
1	SCADA Communications Equipment	$120,000	10	-10	$0	$120,000	$2,000	$243,000
2	**Total:**	**$120,000**			**$0**	**$120,000**	**$2,000**	**$243,000**

3.4.6 Recommended Alternative

Alternative 2 –Retrofit Existing SCADA System is the recommended alternative. Based on the life cycle cost analysis, Alternative 2 is the most cost-effective option that provides SCADA system upgrades that will reduce maintenance and ensure system reliability without full system replacement. Both pump stations are relatively new and do not require major replacement, just rehabilitation upgrades to keep the stations up to date connected to the system.

4. SELECTED PLAN

4.1 Description of Recommended Facilities

The recommended facilities are located on existing properties owned by the City. The recommended lift stations are located on land that will be acquired as a part of further negotiations with developers. Both the Site Certification and Limited Site Certification are located in Appendix D.

4.1.1 Collection System Recommendations

The recommended upgrades to the collection system include eight (8) new duplex lift stations to handle flows from the proposed developments and existing developments with dry sewers, as shown in Figure 4-1. With the expected increase in flows, it is recommended that the existing Groveland Lift Station be upgraded to increase the capacity, including installing larger pumps. The Groveland Lift Station will require upsizing the wet well and providing an onsite backup generator for emergency power since this lift station is critical to the collection system. Flows from developments in the north of the City will be directed to a master pumping station (Lift Station 8) on the eastern border of the City, adjacent to the proposed Langley Development. A new interconnect will also be located just downstream of Lift Station 8 and flows will be conveyed to the proposed new Groveland WWTP. The approximate location of the new interconnect is provided on Figure 4-1. The remaining flows, including those the dry sewer connections, will flow through the Groveland Lift Station.

Over ten (10) miles of force mains will be needed to convey flows from the developments for treatment in Groveland. This includes new force mains from the developments, a force main to the future Groveland WWTP, and upsizing the existing force main along SR-50 tying into the existing interconnect. The recommended collection system upgrades are shown in Figure 4-1.

4.1.2 Wastewater Treatment and Disposal Recommendations

It is recommended that wastewater treatment and disposal for the City continue to be accomplished through an Interlocal Agreement with the City of Groveland. This recommendation requires an amendment to the existing Interlocal Agreement. This amendment should include a revision of the existing agreement to increase the quantity of accepted flows to at least 1.37 MGD to meet the projected wastewater flows. This increase will likely come with an adjusted fee for treatment and disposal, or “Intergovernmental Rate,” and should be negotiated between the two cities.

Additionally, it is expected that the City will be absorbing some of the cost of the proposed Groveland WWTP. It is assumed that the City buy-in fee from Groveland will be a set price, on an EDU basis, and will be established through discussions between the two cities’ governing authorities.

4.1.3 SCADA System Recommendations

It is recommended that the existing wastewater SCADA system be retrofitted to modern industry standards which will allow for system flexibility between different control hardware and software solutions providers. The existing stations control system conduit and wiring are in acceptable condition and upgraded controllers can be readily interfaced with the existing motor control cabinets. Moving the City away from a proprietary control system allows for more flexibility to system modifications in the future.

A new control cabinet will be installed at each existing City lift station site. The new cabinet will be wired into the existing I/O points of the motor control cabinets and the new controllers will be programmed and tested for functionality and alarm handling. New licensed radios and antennas will be installed for communications back to the water treatment plant. A new HMI will be provided at each site to give operators local control and visual station statuses. Additional

Phase	Connected Developments	Associated Infrastructure Construction/Upgrades
Phase 1	Lakeview Estates Lake Jackson Estates/Gardens Knights Lake, Phases 1&2 Shearwater Roper Trails Sunset Lakes Estates Woodbury Villa Pass	LS 1, LS 10, LS 11, LS 12
Phase 2	Heron's Glen Indigo Lakes	LS 5, LS 6*, LS 7, LS 8*
Phase 3	Gardens at Lake Jackson BL Investments Langley Property	LS 6*, LS 8*, LS 9

*Note:
Lift Station 6 and Lift Station 8 shall be paid by both Phase 2 and Phase 3. The Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.

CR 33
HONEYCUT RD
TUSCANOOGA RD
SR 50
SLOANS RIDGE RD
WEST MYERS BLVD
EAST MYERS BLVD
BAY LAKE RD
MASCOTTE EMPIRE RD
W BROAD ST
Indigo Lakes
BL Investments
Heron's Glen
Langley
Lake Jackson Estates/Gardens
Gardens at Lake Jackson
Lakeview Estates
Villa Pass
Roper Trails
Woodbury
Knight's Lake, Phases 1+2
Shearwater
Sunset Lakes Estates
LS 1
LS 2
LS 3
LS 4
LS 5
LS 6
LS 7
LS 8
LS 9
LS 10
LS 11
LS 12
PS
Palatlakaha River
Moon Lake
Heart Lake
Big Bluff Lake
Dukes Lake
Lake Catherine
Lake David
0 0.25 0.5 1 Miles

Recommended Plan & Phasing

City of Mascotte

Figure 4-1

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groveland Interconnection
- Proposed Groveland Interconnection
- Phase 1 Connected Development
- Phase 1 Connected Development (Dry Sewer)
- Phase 2 Connected Development
- Phase 3 Connected Development
- Existing LS
- LS Under Construction
- Phase 1 LS Upgrade
- Phase 1 Proposed LS
- Phase 2 Proposed LS
- Phase 2 & 3 Proposed LS
- Phase 3 Proposed LS
- Exisitng FM
- Phase 1 FM Upgrade
- FM in Design
- Phase 1 FM
- Phase 2 FM
- Phase 3 FM

N

WOODARD &CURRAN

Project #: 0232301.03
Map Created: August 2021

upgrades to the remote communications system will occur under a separate potable water treatment plant upgrade project.

4.2 Environmental Impacts of Recommended Facilities

With exception of the proposed lift stations, all impacts associated with the installation of equipment and structures will be located in previously disturbed public right-of-way. Impacts associated with the installation of the eight (8) proposed lift stations within the planning area are expected to be minimal and will be planned, designed, and constructed according to Florida Department of Environmental Protection (FDEP) requirements and specifications. No lift stations are proposed within existing floodplains. Any impacts to flora, fauna, threatened and endangered plant and animal species, surface water bodies, or wetlands will be avoided. None of the proposed facilities are planned within buffer zones, based upon the FDEP Source Water Assessment and Protection mapping system.

Five (5) out of eight (8) soils found in the proposed lift station project area are considered farmland of unique importance. The remaining three (3) soils are classified as "not prime farmland". Each lift station is proposed to sit on an average of approximately 7,000 square feet of land. Any impact to prime farmland will be minimal and effect only a small portion of farmland of unique importance. See Table 4-1 below for soil type, farmland classification, and drainage class.

A list of threatened, endangered, proposed, candidate species that may be present, and probability of presence summary charts in or near the planned project area and proposed lift station placement are provided in Appendix E and were developed using the U.S. Fish and Wildlife information for Planning and Consultation (IPaC) tool. No negative impacts to threatened, endangered, proposed, or candidate species are anticipated. According to the USFWS IPaC list, no critical habitats are found within the proposed project area. See Table 4-2 for a summary of the IPaC list of the impacted areas of the proposed lift stations.

The proposed projects will result in improved wastewater services, and thus positive impacts on human health and positive environmental effects on communities regardless of race and income.

Table 4-1: Soil Information – Proposed Lift Station Locations

Soil Type	Farmland Classification	Drainage Class
Apopka Sand, 0-5% Slopes	Farmland of Unique Importance	Well Drained
Apopka Sand, 5-12% Slopes	Farmland of Unique Importance	Well Drained
Candler Sand, 0-5% Slopes	Farmland of Unique Importance	Excessively Drained
Candler Sand, 5-12% Slopes	Farmland of Unique Importance	Excessively Drained
Arents	Not Prime Farmland	Somewhat Poorly Drained
Myakka-Myakka, wet, sand,0-2% Slopes	Not Prime Farmland	Poorly Drained
Ellzey Sand	Not Prime Farmland	Poorly Drained
Tavares	Farmland of Unique Importance	Moderately Well Drained

Table 4-2: Summary of IPaC List - Proposed Lift Station Locations

Category	Species Common Name	Species Scientific Name	Status
Birds	Eastern Black Rail	Laterallus Jamaicensis SSP. Jamaicensis	Threatened
	Everglade Snail Kite	Rostrhamus Sociabilis Plumbeus	Endangered
	Wood Stork	Mycteria Americana	Threatened
Reptiles	Gopher Tortoise	Gopherus Polyphemus	Candidate
	Sand Skink	Neoseps Reynoldsi	Threatened
Flowering Plants	Britton's Beargrass	Nolina brittoniana	Endangered
	Florida Bonamia	Bonamia grandiflora	Threatened
	Lewton's Polygala	Polygala Lewtonii	Endangered
	Papery Whitlow-wort	Paronychia Chartacea	Threatened
	Pigeon Wings	Clitoria fragrans	Threatened
	Pygmy Fringe-tree	Chionanthus pygmaeus	Endangered
	Scrub Buckwheat	Eriogonum longifolium var. gnaphalifolium	Threatened
	Scrub Plums	Prunus geniculata	Endangered
	Wide-leaf Warea	Warea amplexifolia	Endangered

4.3 Phasing and Cost Analysis

4.3.1 Project Phasing

The recommended plan is based on the full buildout growth population projection as presented previously in Table 2-7. This projection includes both pending and proposed developments without official agreements. Florida Department of Environmental Protection (FDEP) will not fund projects beyond the scope of reasonable growth. It is recommended that the presented plan be built in a phased approach in order to ensure that the plan is affordable to the City and its rate payers. Additionally, the phasing makes certain that the necessary treatment infrastructure in Groveland has completed construction, such as upgrades to the existing Sampey WWTP and the construction of the Villa City WWTP. Figure 4-1 shows the developments and infrastructure associated with each project phase.

4.3.1.1 Phase 1 – Developments with Flows to Sampey WWTP

Phase 1 includes the developments that will be sending flow to Groveland's existing Sampey WWTP. This consists of the developments with dry sewers and those with an approved and recorded Developer Agreement. Due to the limitations of project affordability for the City as well as potential grant and loan options, Phase 1 has been broken into subphases Phase 1A and Phase 1B, separating the conversion of dry sewer developments, developments in design or construction and new proposed developments. These subphases are discussed in detail below.

4.3.1.1.1 Phase 1A – Dry Sewer Developments and Developments in Design/Construction

Phase 1A includes 841 EDUs, comprised of the developments with dry, inactive sewers that will be connected to the central wastewater collection system as well as developments that are in design or construction at the time of this report. It should be noted that the costs of the associated infrastructure related to the developments in design or construction are not included in Phase 1A, but the respective EDUs will contribute wastewater flows, so they are included in the Interlocal Treatment Buy-in costs. The developments are listed in Table 4-3. It is expected that this phase will be eligible for SRF and/or grant funding.

Table 4-3: Phase 1A Developments

Development Name	Treatment Destination	Development Type	EDUs	Associated Infrastructure Construction/ Upgrades
Lake Jackson Estates/Gardens	Sampey WWTP	Dry Sewer	233	LS 1 LS 10 LS 12
Knights Lake, Phases 1&2	Sampey WWTP	Dry Sewer	116	
Lakeview Estates	Sampey WWTP	Dry Sewer	23	
Shearwater	Sampey WWTP	Dry Sewer	182	
Roper Trails	Sampey WWTP	Design/Construction	75	
Sunset Lakes Estates	Sampey WWTP	Design/Construction	134	
Woodbury	Sampey WWTP	Design/Construction	78	
		Total	**841**	

4.3.1.1.2 Phase 1B – Approved Developments to Existing Sampey WWTP

Phase 1B includes 351 EDUs, comprised of the developments with an approved and recorded Developer Agreement with flows to Sampey WWTP via the existing interconnect. These developments are listed in Table 4-4. It is expected that this phase will be eligible for SRF or grant funding.

Table 4-4: Phase 1B Developments

Development Name	Treatment Destination	Development Type	EDUs	Associated Infrastructure Construction/ Upgrades
Villa Pass	Sampey WWTP	Approved, Pending Recording	351	LS 11
		Total	**351**	

4.3.1.2 Phase 2 – Approved Developments to Proposed Villa City WWTP

Phase 2 includes the developments that will be sending flow to Groveland's proposed Villa City WWTP. This consists of 1,793 EDUs, comprised of the developments with an approved and recorded Developer Agreement. These developments are listed in Table 4-5. It is expected that this phase will be eligible for SRF or grant funding.

Table 4-5: Phase 2 Developments

Development Name	Treatment Destination	Development Type	EDUs	Associated Infrastructure Construction/ Upgrades
Heron's Glen	Villa City WWTP	Approved & Recorded	999	LS 5 LS 6[1] LS 7 LS 8[1]
Indigo Lakes	Villa City WWTP	Approved & Recorded	794	
		Total	**1,793**	

Note: 1. Lift Station 6 and Lift Station 8 costs shall be paid by both Phase 2 and Phase 3. Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.

4.3.1.3 Phase 3 – Proposed Developments

Phase 3 includes the developments that are known and proposed, but do not have an application for a developer's agreement at the time of developing this plan. Therefore, these developments are not guaranteed to come to fruition. The developments will send flows to both the existing Sampey WWTP and proposed Villa City WWTP. This consists of 3,445 EDUs, as listed in Table 4-6. It is expected that this phase will not be eligible for SRF or grant funding at this time and that other funding sources should be considered. This may include costs being absorbed by the developers.

Table 4-6: Phase 3 Developments

Development Name	Treatment Destination	Development Type	EDUs	Associated Infrastructure Construction/ Upgrades
Gardens at Lake Jackson	Sampey WWTP	No Application	105	LS 6[1] LS 8[1] LS 9
BL Investments	Villa City WWTP	No Application	540	
Langley Property	Villa City WWTP	No Application	2,800	
		Total	**3,445**	

Note: 1. Lift Station 6 and Lift Station 8 costs shall be paid by both Phase 2 and Phase 3. Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.

4.3.2 Conceptual Level Project Cost

The conceptual level Opinion of Probable Cost (OPC) for the overall recommended plan is $57.2M in 2021 dollars and is summarized in Table 4-7. Details are presented in Appendix F.

Table 4-7: Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)[1]	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains[2]	$17,978,000	$1,797,000	$19,775,000	$3,559,000	$592,000	$23,926,000
Lift Stations[3]	$6,868,000	$685,000	$7,553,000	$1,360,000	$226,000	$9,139,000
SCADA Upgrades	$37,000	$3,000	$40,000	$7,000	$1,000	$48,000
Total Base Project Cost without Groveland Buy-In	$24,883,000	$2,485,000	$27,367,000	$4,926,000	$821,000	$33,114,000
					Groveland Interlocal Treatment Buy-in[4]	$24,016,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)	**$57,130,000**

1. Engineering and Inspection costs for SCADA upgrades include costs for construction.
2. Force main costs do not include that associated with the Roper Trails lift station.
3. Lift station costs do not include the Roper Trails or Sunset Lakes lift stations.
4. $4,844,000 of Interlocal Treatment Buy-in is attributed to EDUs connecting to the existing Sampey WWTP. $19,172,000 of the Interlocal Treatment Buy-in is attributed to EDUs connecting to the proposed new WWTP in Groveland.

As would be expected, costs increase during a phased approach due to the inefficiencies of construction over long periods of time, as well as escalation of costs over time. The conceptual level cost estimates for each phase are summarized in Table 4-8 through Table 4-11.

Table 4-8: Phase 1A Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)[1]	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains[2]	$4,445,000	$445,000	$4,890,000	$880,000	$147,000	$5,917,000
Lift Stations[3]	$1,597,000	$159,000	$1,756,000	$316,000	$53,000	$2,125,000
SCADA Upgrades	$37,000	$3,000	$40,000	$7,000	$1,000	$48,000
Total Base Project Cost without Groveland Buy-In	$6,079,000	$607,000	$6,685,000	$1,203,000	$201,000	$8,089,000
					Groveland Interlocal Treatment Buy-in[4]	$3,141,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)	**$11,231,000**

1. Engineering and Inspection costs for SCADA upgrades include costs for construction and implementation
2. Force main costs do not include that associated with the Roper Trails lift station.
3. Lift station costs do not include the Roper Trails or Sunset Lakes lift stations.
4. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.

Table 4-9: Phase 1B Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains[1]	$2,023,000	$202,000	$2,225,000	$401,000	$67,000	$2,693,000
Lift Stations[2]	$471,000	$47,000	$518,000	$93,000	$16,000	$627,000
Total Base Project Cost without Groveland Buy-In	$2,494,000	$249,000	$2,743,000	$494,000	$83,000	$3,320,000
					Groveland Interlocal Treatment Buy-in[3]	$1,311,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)	**$4,631,000**

1. Force main costs do not include that associated with the Roper Trails lift station.
2. Lift station costs do not include the Roper Trails or Sunset Lakes lift stations.
3. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.

Table 4-10: Phase 2 Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains	$9,874,000	$987,000	$10,861,000	$1,955,000	$325,000	$13,141,000
Lift Stations[1]	$3,655,000	$365,000	$4,020,000	$724,000	$121,000	$4,865,000
Total Base Project Cost without Groveland Buy-In	$13,529,000	$1,352,000	$14,881,000	$2,679,000	$446,000	$18,006,000
					Groveland Interlocal Treatment Buy-in[2]	$6,697,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)[3]	**$24,703,000**

1. Lift Station 6 and Lift Station 8 costs shall be paid over both Phase 2 and Phase 3. Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.
2. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.
3. Construction costs may need to be escalated once project schedule and timing has been established

Table 4-11: Phase 3 Conceptual Level Cost Estimate Summary – Recommended Plan

	Construction Base Cost	Construction Contingency (10%)	Total Construction Cost	Engineering and Inspection (18%)	Legal, fiscal, and administrative (3%)	Total Project Cost
Force mains	$9,874,000	$987,000	$1,799,000	$323,000	$53,000	$2,175,000
Lift Stations[1]	$3,655,000	$365,000	$1,259,000	$227,000	$38,000	$1,524,000
Total Base Project Cost without Groveland Buy-In	$13,529,000	$1,352,000	$3,058,000	$550,000	$91,000	$3,699,000
					Groveland Interlocal Treatment Buy-in[2]	$12,867,000
					Total Base Project Cost including Groveland Buy-In (2021 Dollars)[3]	**$16,566,000**

1. Lift Station 6 and Lift Station 8 costs shall be paid over both Phase 2 and Phase 3. Phase 3 costs cover the upgrades necessary to handle additional flows from new developments connected in Phase 3.
2. Interlocal Buy-in cost based on an assumed $3,735 per EDU based on the City of Groveland wastewater impact fee for a single-family home presented in Ordinance 2019-50 Sec. 125-23.
3. Construction costs may need to be escalated once project schedule and timing has been established

4.4 Consistency with Comprehensive Plan

The recommendation resulting from this study are consistent with both the City's and the County's local Comprehensive Plans. The 2017 Comprehensive Plan is included as Appendix G.

5. IMPLEMENTATION AND COMPLIANCE

5.1 Public Meeting

A public meeting was held_____, 2021 after advertising in the Daily _____. Resolution _____ to approve this Clean Water Facilities Plan and submit to the FDEP passed at the meeting. A copy of Resolution _____, the legal advertisement affidavit, and certified meeting minutes are provided in Appendix J.

5.2 Regulatory Agency Review

To qualify for a subsidized loan from the SRF, various government agencies must be satisfied with the way that the City of Mascotte is proposing to address their water system challenges. Copies of the Facilities Plan adopted by the City of Mascotte are being sent to the FDEP-SRF for review and comments. The FDEP-SRF staff will distribute this Facilities Plan to approximately 15 Local, State and Federal Agencies via the "State Clearing House Process" for their review and comment

5.3 Financial Planning

The FDEP-SRF program is expected to be the financing source for the project. A capital financing plan (CFP) is included with this Facilities Plan, which provides the financial impact on the users of the water system will be. The CFP is shown in Appendix H and demonstrates that water and sewer operating expenses; existing debt service obligations; and proposed project debt service associated with the selected plan in this facility plan can be funded through current utility rates, existing approved annual increases, and water and sewer impact fees.

The CFP is based on the current utility rates (updated XXX) and the rate ordinance that the City adopted with a consumer price index (CPI) increase annually, as well as water and sewer impact fees. Copies of the documents are provided in Appendix I to support the CFP.

5.4 Project Implementation

The City of Mascotte has the sole responsibility and authority to implement the recommended facilities. As noted previously, the City has an Interlocal Agreement with the City of Groveland to discharge up to 250,000 gpd of wastewater generated within its jurisdictional city limits. This agreement will need to be amended to accommodate the additional flows identified in this Facilities Plan.

5.4.1 Implementation Schedule

The implementation schedule is estimated to follow the timeline below:

Design and Phase 1 Project

- November 2021 – Submit draft Facilities Plan to FDEP & other government agencies
- January 2021 – Prepare Facility Planning documentation
- February 2022 – Hold public meeting on the Facilities Plan and Capital Financing Plan;
- February 2022 – Publication of Department's environmental information document in the Florida Administrative Weekly;
- February 2022 – Submit Request for Inclusion (RFI) to FDEP (Tallahassee) for design funding;

- March 2022 – End of 30-day comment period for the environmental information document approval of planning documents;
- April 2022 – Submit loan application to FDEP (Tallahassee) for Design Phase;
- May 2022 – Resolution and council approval of FDEP loan agreements for design;
- June 2022 – Complete loan agreements for design phase and release contract for design;
- June 2022 – May 2023 – Project Design
- June 2023 - Submit plans and specifications to the FDEP (Tallahassee) and submit the construction permit application for Phase 1 to the FDEP (District Office);
- July 2023 – Notice of intent to permit construction of Phase 1 issued and project added to the priority list;
- July 2023– Submit Request for Inclusion (RFI) for inclusion of the Phase 1 construction to FDEP's project priority list;
- August 2023 – Hearing to add Phase 1 to the Fundable portion of the priority list;
- August 2023 – Submit loan application for Phase 1 to FDEP (Tallahassee) for construction activities;
- September 2023 – Resolution and council approval of FDEP loan agreements for construction of Phase 1;
- October 2023 – Complete Phase 1 loan agreements for construction activities;
- October 2023 – Advertise for Phase 1 bids;
- December 2023 – Open construction Phase 1 bids;
- February 2024 – Award Phase 1 contract;
- April 2024 – Start Phase 1 project construction;
- October 2025 – Complete construction of the Phase 1 project;
- January 2026 – Certify operation performance of the project and close out the Phase 1 project; and
- July 2026 – Begin SRF loan repayments to FDEP for Phase 1.

Phase 2 Project

- March 2025 - Submit the construction permit application for Phase 2 to the FDEP (District Office);
- April 2025 – Notice of intent to permit construction of Phase 2 issued and project added to the priority list;
- April 2025 – Submit Request for Inclusion (RFI) for addition of the Phase 2 construction to FDEP's project priority list;
- May 2025 – Hearing to add Phase 2 construction to the Fundable portion of the priority list;
- May 2025 – Submit loan application for Phase 2 to FDEP (Tallahassee) for construction phase;
- June 2025 – Resolution and council approval of FDEP loan agreements for construction of Phase 2;
- July 2025 – Complete Phase 2 loan agreements for construction activity;
- July 2025 – Advertise for Phase 2 bids;
- September 2025 – Open construction Phase 2 bids;

- November 2025 – Award Phase 2 contract;
- January 2026 – Start Phase 2 project construction;
- January 2028 – Complete construction of the Phase 2 project;
- April 2028 – Certify operation performance of the project and close out the Phase 2 project; and
- October 2028 – Begin SRF loan repayments to FDEP for Phase 2.

Phase 3 Project

- March 2027 - Submit the construction permit application for Phase 3 to the FDEP (District Office);
- April 2027 – Notice of intent to permit construction of Phase 3 issued and project added to the priority list;
- April 2027 – Submit Request for Inclusion (RFI) for addition of the Phase 3 construction to FDEP's project priority list;
- May 2027 – Hearing to add Phase 3 to the Fundable portion of the priority list;
- May 2027 – Submit loan application for Phase 3 to FDEP (Tallahassee) for construction activity;
- June 2027 – Resolution and council approval of FDEP loan agreements for construction of Phase 3;
- July 2027 – Complete Phase 3 loan agreements for construction activity;
- July 2027 – Advertise for Phase 3 bids;
- September 2027 – Open construction Phase 3 bids;
- November 2027 – Award Phase 3 contract;
- January 2028 – Start Phase 3 project construction;
- January 2030 – Complete construction of the Phase 3 project;
- April 2030 – Certify operation performance of the project and close out the Phase 3 project; and

  October 2030 – Begin SRF loan repayments to FDEP for Phase 3.

5.5 Compliance

1. Selected alternatives will meet the reliability requirements as per chapter 62-600, F.A.C.
2. Residual disposal will meet the requirements of Chapter 62-701, F.A.C. and 40 CFR Part 503
3. Environmental aspects of the proposed facilities are satisfactory.
4. Recommended facilities are consistent with the City of Mascotte's Comprehensive Plan.

6. REFERENCES

C&D Engineering, Inc. "Wastewater Facilities Plan – City of Mascotte," 2008.

City of Mascotte. "Comprehensive Plan," 2017

Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. "Recommended Standards for Wastewater Facilities: Policies for the design, review, and approval of plans and specifications for wastewater collection and treatment facilities," 2014.

New England Interstate Water Pollution Control Commission. "TR-16 Guides for the Design of Wastewater Treatment Works," 2011, rev. 2016

Water Environment Federation. "Design of Municipal Wastewater Treatment Plants MOP 8, 5th Edition," 2012.

APPENDIX A: 2020 SOURCE WATER ASSESSMENT & PROTECION PROGRAM RESULTS

» SWAPP Homepage
» Search By County
» Search by PWS Name or Number
» How to Help?

Definitions

» Aquifers
» Public Water Systems
» Assessment
» Potential Contaminants
» Susceptibility
» Prevention

Contact Us

» Email
» Mailing Address
» Source Water Protection Workshop

EPA Source Water Protection website

Source Water Assessment & Protection Program

Results for: 2020

MASCOTTE WATER DEPARTMENT
143 KNIGHT ST.
MASCOTTE, FL 34753

Public Water System ID: 3350812

Previously Known As:
MASCOTTE WATER DEPARTMENT-2WPS

County: LAKE
DEP Regulatory Office: DEP Central District
3319 Maguire Blvd, Suite 232
Orlando, FL 32803
407-897-4100
Public Water System Type : COMMUNITY
Public Water System Source : GROUND
Primary Use: MUNICIPAL/CITY
Population Served: 7952
Size of Assessment Area:
GROUND: For this community system, a 5-year ground water travel time around each well was used to define the assessment area. The 5-year ground water travel time is defined by the area from which water will drain to a well pumping at the average daily permitted rate for a five year period of time.

Number of Wells: 2

Well ID	Owner ID	FLUWID	Status	Well Depth(ft)	Aquifer
4887	WELL#1-450'/210'@700GPM	AAF4505	ACTIVE	450	Floridan Aquifer
36277	WELL 2B	AAC4876	ACTIVE	650	Floridan Aquifer

Results:

GROUND WATER:

Number of Unique Potential Contaminant Sources: 4

Facility Type	Facility Class	Status	Name	Affected Well	Susceptibility Score	Concern Level
INDUSTRIAL WASTEWATER	WASTEWATER SITE	A	Cal-Maine Foods-Mascotte Facility	4887	0.03	LOW
INDUSTRIAL WASTEWATER	WASTEWATER FACILITY	A	Cal-Maine Foods-	36277	0.03	LOW

			Mascotte Facility			
INDUSTRIAL WASTEWATER	WASTEWATER SITE	A	Cal-Maine Foods-Mascotte Facility	36277	0.03	LOW
DELINEATED AREAS	N/A	ACTIVE	Zone ID: 35263171	36277	33.33	MODERATE
PETROLEUM STORAGE TANK	LOCAL GOVERNMENT	OPEN	MASCOTTE CITY-KNIGHT ST WTP	36277	8.33	LOW
PETROLEUM STORAGE TANK	LOCAL GOVERNMENT	OPEN	MASCOTTE CITY-KNIGHT ST WTP	4887	8.33	LOW
DELINEATED AREAS	N/A	ACTIVE	Zone ID: 35263171	4887	33.33	MODERATE
INDUSTRIAL WASTEWATER	WASTEWATER FACILITY	A	Cal-Maine Foods-Mascotte Facility	4887	0.03	LOW

Last updated: February 19, 2020

3900 Commonwealth Boulevard M.S. 49
Tallahassee, Florida 32399
850-245-2118 (phone) / 850-245-2128 (fax)

APPENDIX B: INTERLOCAL AGREEMENTS

City of Mascotte 2014 Interlocal Agreement

development, should Groveland determine it has sufficient capacity to accommodate the additional demand. Decisions of whether Groveland will accommodate additional demands of Mascotte development shall be made on a case-by-case basis.

3. Mascotte shall pay to Groveland, in the manner specified in this Agreement, the sum of $2.63 per 1,000 gallons of wastewater accepted by Groveland from Mascotte for treatment and disposal ("Intergovernmental Rate"). This amount includes a 25% surcharge which may be charged to customers outside of a municipal provider's city limits pursuant to § 180.191(1)(a), Fla. Statutes, Furthermore, the assent by Groveland to accept wastewater from Mascotte shall not be construed to obligate Groveland to accept, or consider accepting, wastewater from other sources.

4. The Intergovernmental Rate shall be subject to adjustment simultaneously with any rate adjustments imposed by Groveland to consumers inside the Groveland municipal boundaries. ~~on an annual basis by Groveland~~. Written notice of each rate change shall be given by Groveland to Mascotte by no later than ~~May 31 each year~~, 120 days prior to the effective date of any rate adjustment ~~for implementation effective the following October 1 in each year~~. The first rate change notice ~~shall be given on or before May 31, 2013~~ may be provided in 2013. The adjustment shall be based on the same index used by Groveland to adjust the wastewater rate charged by Groveland to consumers inside the Groveland municipal boundaries.

5. Mascotte shall, at its sole expense, construct or cause to be constructed by developers or other third parties, the sanitary sewer force main to transmit wastewater from Mascotte's collection system to Groveland's existing force main at the location shown as "Point B" on Exhibit "A" attached and incorporated herein. Mascotte shall also, at its sole expense, construct or cause to be constructed by developers or other third parties, the collection system to collect and transmit wastewater from individual homes, businesses and other customers of Mascotte, to the force main which will in turn transmit the wastewater to Groveland's existing force main.

6. Mascotte shall submit to Groveland all development plans within the City of Mascotte which involve connection to the Groveland-owned sewer system for review and approval prior to approval by Mascotte. All sewer design plans and systems constructed by or under the direction of Mascotte which will fall under Groveland's operation and maintenance jurisdiction must meet all the standards and requirements of Groveland and other governmental agencies with jurisdiction, and must be inspected and approved by Groveland before connection to Groveland's own system.

7. The parties agree on a "Demarcation Point" as illustrated and described as "Point A" on Exhibit "A" attached and incorporated herein. Mascotte shall be responsible, financially and otherwise, for operation and maintenance of the wastewater system on its side of the Demarcation Point. Groveland shall be responsible, financially and otherwise, for operation and maintenance of the wastewater system on its side of the Demarcation Point.

8. Each customer of Mascotte connecting to the wastewater system must pay a wastewater impact fee to Groveland, in the same amount as a comparable customer of Groveland would have to pay to connect to its system. Such impact fees shall be collected by Mascotte and

Groveland shall notify Mascotte at least thirty (30) days in advance of adoption of the proposed ordinance or resolution. Mascotte agrees to implement such requirement contained therein no less than thirty (30) days from the date of the notice.

12. Mascotte shall be responsible for notifying sewer customers within the City of Mascotte of any rate changes as required by general law. This requirement also relates to sewer system improvements, connection and impact fees, rate changes, and other related items.

13. Mascotte agrees to work with Groveland in establishing a system whereby messages and notifications may be delivered to sewer customers within the City of Mascotte.

14. Mascotte shall be responsible for the design, purchase, installation and maintenance of a master meter to provide an accurate measurement of the wastewater flows. Annual certification of the master meter will be provided to the City of Groveland Utility Department. Groveland will invoice Mascotte on a monthly basis for the amount due for treatment and disposal of Mascotte's wastewater. The amount to be billed shall be based on the master meter reading. If wastewater flows are of a minimal amount and it is determined by Groveland that a master meter is unable to provide an accurate reading, then billing will be based on Mascotte's billed water consumption for each of its water customers who are connected to the wastewater system, and Mascotte will be billed based on aggregate billed water consumption for all of its wastewater customers until such time as Groveland determines the master meter will accurately be able to read the wastewater flow. Regardless of the basis for determining the amount to be billed, Mascotte shall furnish billed water consumption for its wastewater customers to Groveland on a monthly basis and on the same schedule that Mascotte issues bills for the water consumption to its customers. Payment will be due to Groveland no later than the twentieth (20th) day of each month, regardless of whether Mascotte has collected the amounts due for wastewater service from each of its customers. Payment will be considered delinquent, and Mascotte will be considered in default under this Agreement, if payment is not received by Groveland by the twentieth (20^{th}) day of each month. Groveland shall be paid first from amounts collected by Mascotte for wastewater service from its customers, before such revenues are utilized for any other purpose whatsoever.

15. If Mascotte defaults in payment under the standards specified in Paragraph 14 above, Groveland may exercise any one or more of the following remedies:

A. Submit an invoice to Mascotte for interest at the rate of 10% of the delinquent amount from the date of default;

B. Terminate further acceptance of wastewater from Mascotte until all sums owed to Groveland have been paid in full, with interest at the rate of 10% per year from the date of default through the date of payment;

C. Subject to paragraph 19 herein, file suit against Mascotte in a court of competent jurisdiction in Lake County, Florida, to collect the past due amount with interest as stated above, together with all court costs and reasonable attorneys' fees incurred in the collection process, both before and after suit is filed;

21. This Agreement is solely for the benefit of the parties hereto, and no right or cause of action shall accrue upon or by reason hereof, to or for the benefit of any third party. Nothing in this Agreement, either expressed or implied, is intended or shall be construed to confer upon or give any person, corporation or governmental entity other than the parties any right, remedy or claim under or by reason of this Agreement or any provisions or conditions hereof, and all the provisions, representations, covenants, and conditions herein contained shall insure to the sole benefit of and shall be binding upon the parties, and their respective representatives, successors and assigns. In particular, and without limiting the generality of the foregoing, individual customers of Mascotte are not intended as third party beneficiaries of this Agreement, and shall have no standing to enforce this Agreement or to assert any claim against Groveland which arises out of or is related any way to this Agreement or the services provided by Groveland under this Agreement.

22. Each represents and warrants for the benefit and reliance of the other its respective authority to enter into this Agreement, and acknowledges the validity and enforceability of this Agreement. The parties hereby represent, warrant and covenant this Agreement constitutes a legal, valid and binding contract enforceable by the parties in accordance with its terms and conditions, and that the enforceability is not subject to any impairment by the applicability of any public policy or police powers.

23. This Agreement sets forth the entire understanding of the parties with regard to its subject matter. It supersedes and takes precedence over any and all prior negotiations, representations and agreements, oral or written, all of which are deemed to have merged into this Agreement and to have been extinguished except to the extent specifically set forth herein. This Agreement may not be amended orally, by implication, by course of conduct, or in any other manner whatsoever than by way of a written instrument signed by both parties hereto or their lawful successors. This Agreement shall be construed in accordance with the laws of Florida and venue for any action or proceeding arising out of this Agreement shall be in Lake County, Florida. This Agreement shall be binding on the parties hereto, as well as on their lawful successors and assigns. Each party represents for the benefit of the other that it has not entered into this Agreement in reliance on, or on the basis of, any promise, negotiation, representation, undertaking or agreement of the other party, oral or written, which is not specifically set forth within this Agreement.

24. If any portion of this Agreement is declared invalid or unenforceable, then to the extent it is possible to do so without destroying the overall intent and effect of this Agreement, the portion deemed invalid or unenforceable shall be severed here from and the remainder of this Agreement shall continue in full force and effect as if it were enacted without including the portion found to be invalid or unenforceable.

25. This Agreement shall be recorded in the Public Records of Lake County, Florida, as required by applicable Florida Statutes.

IN WITNESS WHEREOF, each of the parties has caused its duly authorized representatives to set their hands to this Agreement on the dates indicated below.

THE CITY OF GROVELAND, FLORIDA

THE CITY OF MASCOTTE, FLORIDA

BY: _____
TONY ROSADO, Mayor

ATTEST: Michelle Hawkins
MICHELLE HAWKINS, CMC,
City Clerk

Witnesses:

Dolly Miller
Print Name: Dolly Miller

Stephanie Colvin
Print Name: Stephanie Colvin

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me this 6th day of May, 2013, by Tony Rosado, as Mayor of the City of Mascotte, Florida, who executed the foregoing instrument and acknowledged before me that he executed the same for the uses and purposes therein expressed, and who is personally known to me.

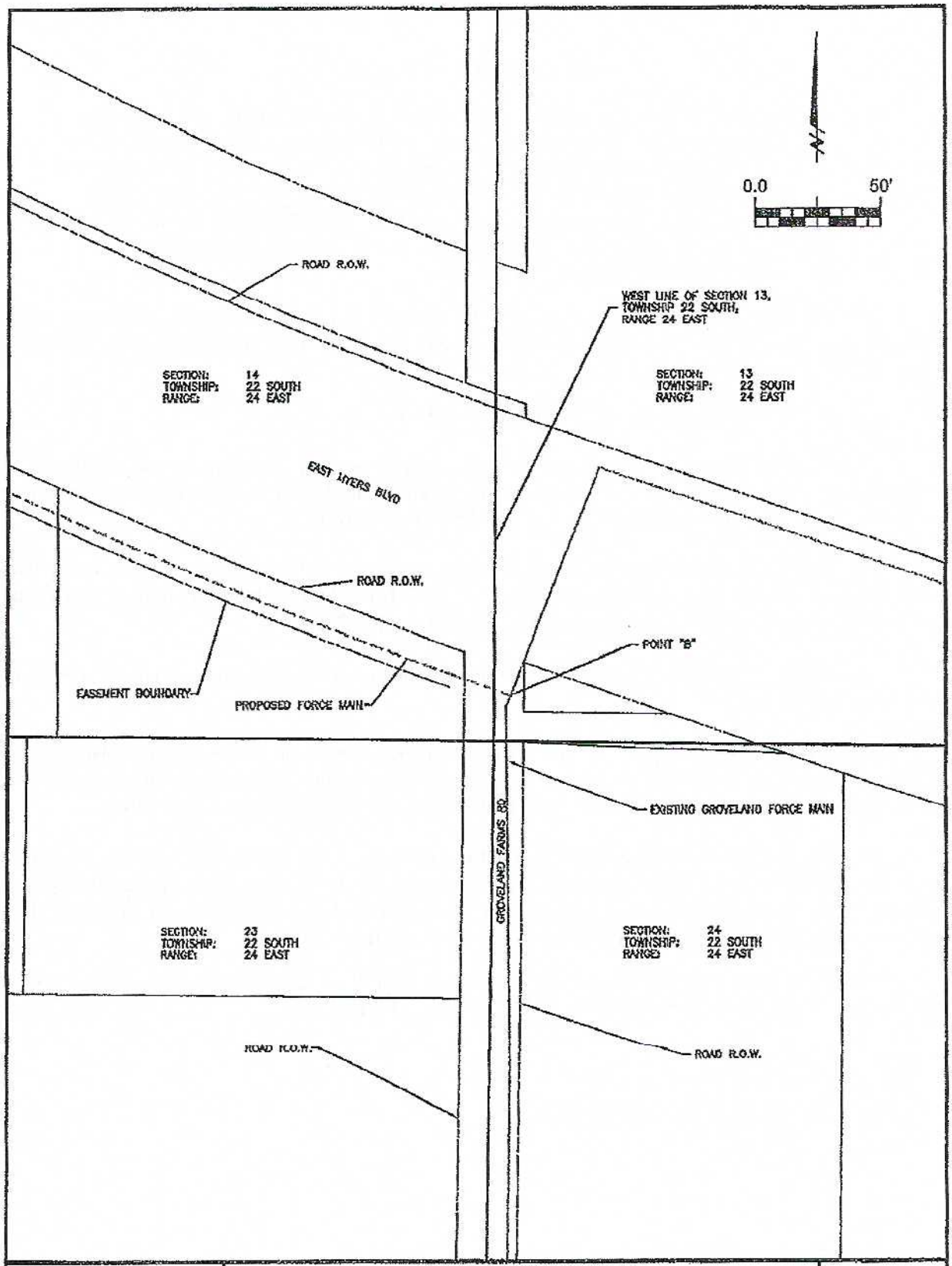
Michelle Hawkins
Notary Public

SEAL

MICHELLE HAWKINS
Commission # DD 969650
Expires July 10, 2014

Michelle Hawkins
Type or Print Name

My Commission Expires:
July 10, 2014



C & D Engineering, Inc.	SKETCH OF DESCRIPTION MASCOTTE UTILITIES SERVICE DISTRICT & THE CITY OF GROVELAND	SHEET 2 OF 2

ATTEST:

Teresa Begley
City Clerk

Approved as to Legality and Form:

Anita Geraci-Carver
City Attorney

Passed First Reading 04/15/2013

Council Member LOUCKS moved the passage and adoption of the above and foregoing Resolution. Motion was seconded by Council Member SMITH and upon roll call on the motion the vote was as follows:

	YEA	NAY
James Gearhart		
John Griffin		
Tim Loucks		
Jared Mincey		
James Smith		

EXHIBIT "A"

DESCRIPTION: POINT "B"

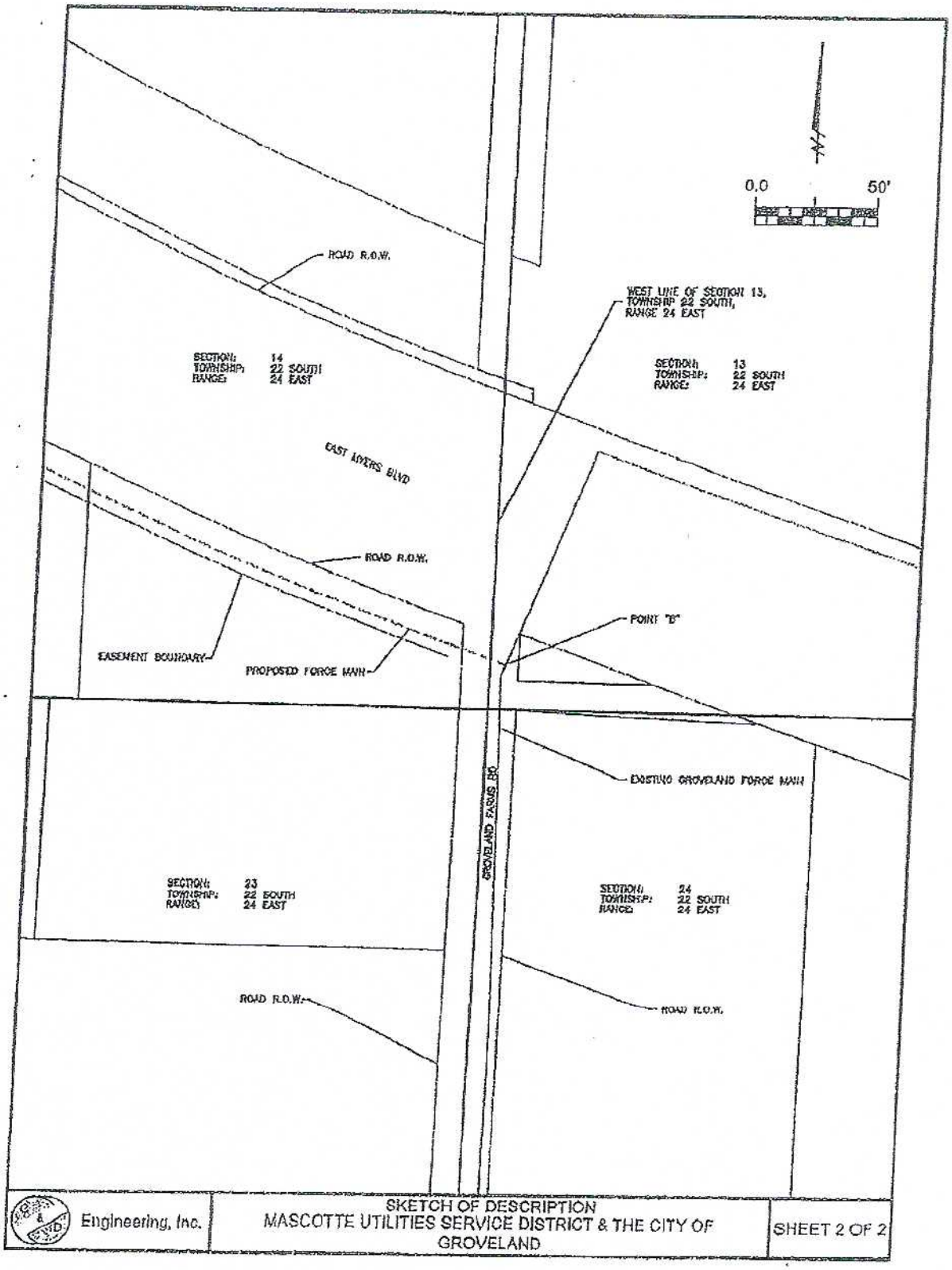
A POINT LYING NEAR THE EASTERLY LIMITS OF THE CITY OF MASCOTTE, CLOSE TO THE INTERSECTION OF GROVELAND FARMS ROAD AND EAST MYERS BOULEVARD.

SAID POINT BEING LOCATED NEAR THE SOUTHWEST CORNER OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 24 EAST.

ALSO DESCRIBED AS:
BEGIN AT THE SOUTHWEST CORNER OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 24 EAST AND RUN NORTH ALONG THE WEST LINE OF SAID SECTION APPROXIMATELY 16.5 FEET THEN EAST A DISTANCE OF APPROXIMATELY 6.5 FEET TO POINT "B" AND THE END OF THIS DESCRIPTION.

GENERAL NOTES

1. This is NOT A BOUNDARY SURVEY.
2. This sketch is to show existing site information and improvements for the sole purpose of conceptual design.
3. This sketch was prepared for the City of Mascotte and its assigns as there interests may appear. Use of this sketch by any other parties is strictly forbidden.
4. Use of the sketch shown on sheet 2 for any other purpose than that stated in note (2) is the sole responsibility of the user.
5. All information outside the labeled limits of this site is for general reference purposes only. Assumption of correctness outside of said site boundary is the liability of the user.
6. The bearings, shown hereon, are relative to assumed datum and are based on Geographic Information System (GIS) data obtained from Lake County, Florida.
7. This sketch was prepared by C&D Engineering, Inc. for the City of Mascotte.
8. This sketch contains 2 sheets in which NONE are valid without all remaining sheets.



Engineering, Inc.	SKETCH OF DESCRIPTION MASCOTTE UTILITIES SERVICE DISTRICT & THE CITY OF GROVELAND	SHEET 2 OF 2

SKETCH OF DESCRIPTION
(NOT A FIELD SURVEY)

NOTES:

A POINT LYING NEAR THE EASTERLY LIMITS OF THE CITY OF MASCOTTE, CLOSE TO THE INTERSECTION OF UNDERPASS ROAD AND VILLA CITY ROAD.

SAID POINT BEING LOCATED 1,315 FEET NORTH OF THE SOUTHWEST CORNER OF SECTION 12, TOWNSHIP 22 SOUTH, RANGE 24 EAST

ALSO DESCRIBED AS:
BEGIN AT THE SOUTHWEST CORNER OF RIGHT-OF-WAY AT THE INTERSECTION OF UNDERPASS ROAD AND VILLA CITY ROAD, LOCATED IN SECTION 11, TOWNSHIP 22 SOUTH, RANGE 24 EAST. THEN RUN N90°00'00"E FOR A DISTANCE OF APPROXIMATELY 58.01 FEET, THEN RUN S00°00'00"E FOR A DISTANCE OF APPROXIMATELY 44.09 FEET TO "POINT C" AND THE END OF THIS DESCRIPTION.

NOTES:

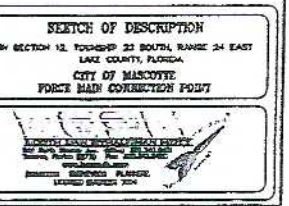
1. THIS IS NOT A BOUNDARY SURVEY.
2. THIS SKETCH IS TO SHOW EXISTING SITE INFORMATION AND IMPROVEMENTS FOR THE SOLE PURPOSE OF CONCEPTUAL DESIGN.
3. THIS SKETCH WAS PREPARED FOR THE CITY OF MASCOTTE AND ITS ASSIGNS AS THERE INTERESTES MAY APPEAR. USE OF THIS SKETCH BY ANY OTHER PARTIES IS STRICTLY FORBIDDEN.
4. USE OF THIS SKETCH FOR ANY OTHER PURPOSE THAN STATED IN NOTE (2) IS THE SOLE RESPONSIBILITY OF THE USER.
5. ALL INFORMATION OUTSIDE THE LABLED LIMITS OF THIS SITE IS FOR GENERAL REFERENCE PURPOSES ONLY. ASSUMPTION OF CORRECTNESS OUTSIDE OF SAID SITE BOUNDARY IS THE LIABILITY OF THE USER.
6. HORIZONTAL DATUM SHOWN HEREON IS IN U.S. FEET.
7. THIS SKETCH WAS PREPARED BY BESH, INC. FOR THE CITY OF MASCOTTE.
8. THIS SKETCH CONTAINS 2 SHEETS IN WHICH NONE ARE VALID WITHOUT ALL REMAINING SHEETS.

SHEET 1 OF 2

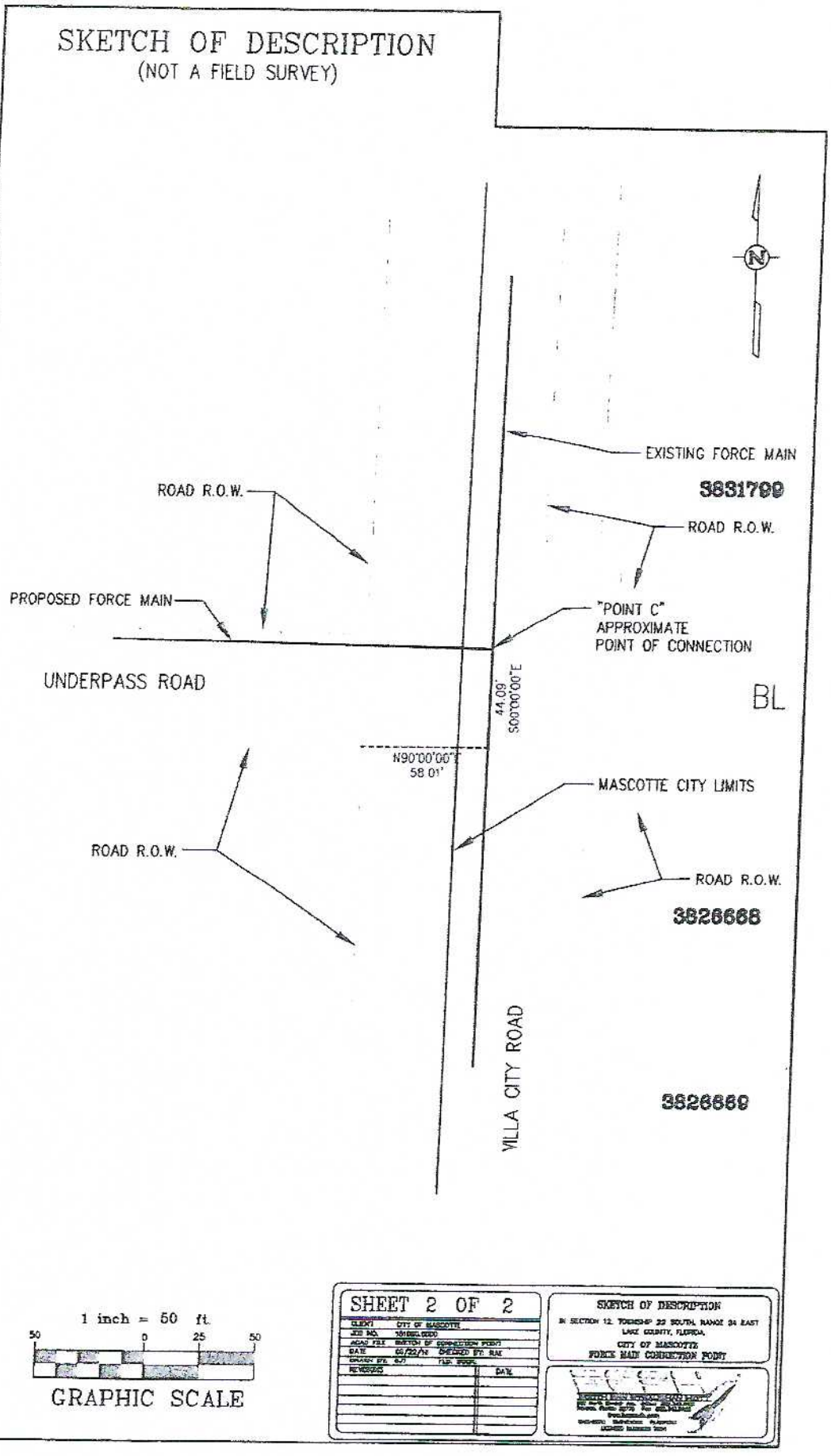
CLIENT	CITY OF MASCOTTE
JOB NO.	191080.0000
ACAD FILE	SKETCH OF CONNECTION POINT
DATE	06/12/19 CHECKED BY: RAE
DRAWN BY:	BJT FLD. BOOK:

REVISIONS	DATE

SKETCH OF DESCRIPTION
IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 24 EAST
LAKE COUNTY, FLORIDA.
CITY OF MASCOTTE
FORCE MAIN CONNECTION POINT



SKETCH OF DESCRIPTION
(NOT A FIELD SURVEY)



SHEET 2 OF 2

CLIENT	CITY OF MASCOTTE
JOB NO.	20180LG000
ACAD FILE	SKETCH OF CONNECTION POINT
DATE	05/22/18 CHECKED BY: RAK
DRAWN BY:	MJT TASK GROUP:
REVISIONS	DATE

SKETCH OF DESCRIPTION
IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 24 EAST
LAKE COUNTY, FLORIDA.
CITY OF MASCOTTE
FORCE MAIN CONNECTION POINT

City of Mascotte 2016 Interlocal Agreement
Resolution

INSTRUMENT #2016112739
OR BK 4855 PG 2097 - 2107 (11 PGS)
DATE: 10/28/2016 2:21:01 PM
NEIL KELLY, CLERK OF THE CIRCUIT COURT
LAKE COUNTY
RECORDING FEES $95.00

CITY OF MASCOTTE
100 EAST MYERS BLVD
MASCOTTE FL 34753

RESOLUTION 2016-10-593

A RESOLUTION OF THE CITY OF MASCOTTE, FLORIDA, APPROVING AND ACCEPTING A FIRST AMENDMENT TO AN INTERLOCAL AGREEMENT WITH THE CITY OF GROVELAND REGARDING PROVISION OF WASTEWATER SERVICES; AUTHORIZING MAYOR TO EXECUTE THE FIRST AMENDMENT TO THE AGREEMENT; PROVIDING DIRECTIONS TO CITY MANAGER; PROVIDING FOR CONFLICTS AND SEVERABILITY; ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Mascotte and the City of Groveland have negotiated terms of a First Amendment to an Interlocal Agreement entered into between the Cities on May 6, 2013, whereby the City of Groveland will accept and treat wastewater generated within the jurisdictional limits of the City of Mascotte.

NOW THEREFORE, BE IT RESOLVED THAT:

Section 1. The City Council of Mascotte hereby accepts and approves of the First Amendment to that Interlocal Agreement entered into with the City of Groveland on May 6, 2013. A copy of the First Amendment to the Interlocal Agreement is attached to this Resolution. The Mayor is authorized to execute two originals of the Interlocal Agreement on behalf of the City of Mascotte.

Section 2. Directions to City Manager. After the Mayor of Mascotte executes two originals of the First Amendment to the Interlocal Agreement, the City Manager or designee is hereby directed to send the two originals and a copy of this Resolution to the City Manager of the City of Groveland.

Section 3. Conflicting Resolutions. All resolutions in conflict herewith are hereby repealed to the extent of such conflict.

Section 4. Severability. If any section, sentence, clause or phrase of this Resolution or First Amendment to the Interlocal Agreement is held to be invalid or unconstitutional by any court of competent jurisdiction, that holding in no way affect the remaining portion of this Resolution or First Amendment to the Interlocal Agreement.

Section 5. Effective Date; Term of Agreement. The Effective Date of this Resolution and First Amendment to the Interlocal Agreement shall be the date when both parties have executed the First Amendment and signed Resolutions approving said First Amendment. The term of the First Amendment shall be as set forth in Paragraphs 17 and 18 of the First Amendment.

PASSED AND ADOPTED by the City Council of the City of Mascotte, Lake County, Florida, at a regular Council meeting, this 3rd day of October, 2016.

CITY OF MASCOTTE

BY: Barbara Krull
Barbara Krull, Mayor

ATTEST:
Michelle Hawkins
Michelle Hawkins, CMC, City Clerk

1st AMENDMENT TO INTERLOCAL AGREEMENT BETWEEN THE CITY OF GROVELAND AND THE CITY OF MASCOTTE FOR PROVISION OF WASTEWATER SERVICES

THIS 1st AMENDMENT to the Interlocal Agreement is entered into between the **CITY OF GROVELAND, FLORIDA** ("Groveland"), and the **CITY OF MASCOTTE, FLORIDA** ("Mascotte").

WHEREAS, an Interlocal Agreement ("Agreement") between the City of Groveland and the City of Mascotte for Provision of Wastewater Services was entered into by the parties on May 6, 2013.

WHEREAS, the parties wish to amend the Agreement in several respects and, accordingly, enter into this 1st Amendment to the Interlocal Agreement ("1st Amendment"). Words ~~stricken~~ are deletions from the Agreement; words underlined are additions.

NOW THEREFORE, in consideration of the mutual covenants contained in this 1st Amendment, and for other good and valuable consideration, the parties hereby agree as follows:

1. The foregoing recitals are true and correct and incorporated herein by reference.

2. Paragraph 2 of the Agreement is hereby amended to read as follows:

   2. Subject to the terms, conditions and limitations contained in this Agreement, Groveland shall accept wastewater from Mascotte for treatment and disposal at Groveland's wastewater treatment plants. Groveland shall not be obligated to accept from Mascotte any more than ~~25,000~~ two hundred fifty thousand (250,000) gallons per day of wastewater.

   ...

   B. Notwithstanding the foregoing, the parties acknowledge that wastewater demands of individual developments in Mascotte may require in excess of ~~25,000~~ two hundred fifty thousand (250,000) gallons per day and that this Agreement may be amended to accommodate the wastewater demands of an individual development, should Groveland determine it has sufficient capacity to accommodate the additional demand. Decisions of whether Groveland will accommodate additional demands of Mascotte development shall be made on a case-by-case basis.

3. Paragraph 5 of the Agreement is hereby amended to read as follows:

5. Mascotte shall, at its sole expense, construct or cause to be constructed by developers or other third parties, the sanitary sewer force mains to transmit wastewater from Mascotte's collection system to Groveland's existing force main at the locations shown as "Point B" on Exhibit "A" and "Point C" on Exhibit "B" attached and incorporated herein. Mascotte shall also, at its sole expense, construct or cause to be constructed by developers or other third parties, the collection system to collect and transmit wastewater from individual homes, businesses and other customers of Mascotte, to the force main which will in turn transmit the wastewater to Groveland's existing force main.

4. Paragraph 7 of the Agreement is hereby amended to read as follows:

7. The parties agree on ~~a~~ "Demarcation Points" as illustrated and described as "Point ~~A~~ B" on Exhibit "A" and "Point C" on Exhibit "B" attached and incorporated herein. Mascotte shall be responsible, financially and otherwise, for operation and maintenance of the wastewater system on its side of the Demarcation Points. Groveland shall be responsible, financially and otherwise, for operation and maintenance of the wastewater system on its side of the Demarcation Points.

5. Paragraph 14 of the Agreement is hereby amended to read as follows:

14. Mascotte shall be responsible for the design, purchase, installation and maintenance of a master meter at each "Demarcation Point" to provide an accurate measurement of the wastewater flows. Annual certification of the master meters will be provided to the City of Groveland Utility Department. Groveland will invoice Mascotte on a monthly basis for the amount due for treatment and disposal of Mascotte's wastewater. The amount to be billed shall be based on the master meter readings. If wastewater flows are of a minimal amount and it is determined by Groveland that a master meter is unable to provide an accurate reading, then billing will be based on Mascotte's billed water consumption for each of its water customers who are connected to that master meter ~~the wastewater system~~, and Mascotte will be billed based on aggregate billed water consumption for all of its wastewater customers served by the master meter which is unable to provide an accurate reading, until such time as Groveland determines the master meter will accurately be able to read the wastewater flow. Regardless of the basis for determining the amount to be billed, Mascotte shall furnish billed water consumption for its wastewater customers to Groveland on a monthly basis and on the same schedule that Mascotte issues bills for the water consumption to its customers. Payment will be due to Groveland no later than the twentieth (20th) day of each month, regardless of whether Mascotte has collected the amounts due for wastewater service from each of its customers. Payment will be considered delinquent, and Mascotte will be

considered in default under this Agreement, if payment is not received by Groveland by the twentieth (20th) day of each month. Groveland shall be paid first from amounts collected by Mascotte for wastewater service from its customers, before such revenues are utilized for any other purpose whatsoever.

6. Paragraph 17 of the Agreement shall be deleted in its entirety and replaced with the following:

> 17. This 1st Amendment shall be effective upon final adoption of an ordinance or resolution (as each may require) by both parties, and the Effective Date shall be the date of final adoption by the last party. The term of this 1st Amendment shall be for a period of ten (10) years ("Initial Term") from its Effective Date. If this 1st Amendment is not terminated prior to the end of the Initial Term pursuant to paragraph 18 of the Agreement, then this 1st Amendment shall be automatically renewed for an extension term of five (5) years.

7. Paragraph 18 of the Agreement shall be deleted in its entirety and replaced with the following:

> 18. Upon the expiration of the Initial Term, this 1st Amendment shall automatically be extended upon the same terms and conditions set forth herein for an extension term of five (5) years, and for 5-year extension terms thereafter (each an "Extension Term"), unless either Party terminates this Agreement effective at the end of the current Initial Term or Extension Term by giving to the other party written notice, pursuant to paragraph 20 of the Agreement, of its intention to so terminate at least one hundred twenty (120) days prior to the end of the then current Initial Term or Extension Term.

8. All other terms and conditions contained in the Agreement not changed, amended, or modified through this 1st Amendment shall remain unchanged and in full force and effect. In the event there is an inconsistency between this 1st Amendment and the Agreement, this Agreement shall govern.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, each of the parties has caused its duly authorized representatives to set their hands to this Agreement on the dates indicated below.

THE CITY OF GROVELAND, FLORIDA

BY: _____
Tim Loucks, Mayor

ATTEST: _____
TERESA BEGLEY, City Clerk

APPROVED AS TO FORM AND CONTENT:

_____
CITY ATTORNEY

Witnesses:

_____
Print Name: Lise Cortese

_____
Print Name: Gwen Walker

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me this 15 day of August 2016, by Tim Loucks, as Mayor of the City of Groveland, Florida, who executed the foregoing instrument and acknowledged before me that he executed the same for the uses and purposes therein expressed, and who is personally known to me.

_____
Notary Public

SEAL

_____
Type or Print Name

My Commission Expires:

TERESA F MAXWELL
Notary Public - State of Florida
Commission # GG 005357
My Comm. Expires Dec 29, 2017

THE CITY OF MASCOTTE, FLORIDA

BY: Barbara Krull
Barbara Krull, Mayor

ATTEST: Michelle Hawkins
MICHELLE HAWKINS, CMC,
City Clerk

APPROVED AS TO FORM AND CONTENT:

CITY ATTORNEY

Witnesses:

Print Name: James P. Gleason

Print Name: Stephanie Abrams

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me this 3rd day of October 2016, by Barbara Krull, as Mayor of the City of Mascotte, Florida, who executed the foregoing instrument and acknowledged before me that he executed the same for the uses and purposes therein expressed, and who is personally known to me.

Michelle Hawkins
Notary Public

Michelle Hawkins
Type or Print Name

SEAL

MICHELLE HAWKINS
Commission # FF 100239
Expires July 10, 2018
Bonded Thru Troy Fain Insurance 800-385-7019

My Commission Expires:
July 10, 2018

EXHIBIT "A"

DESCRIPTION: POINT "B"

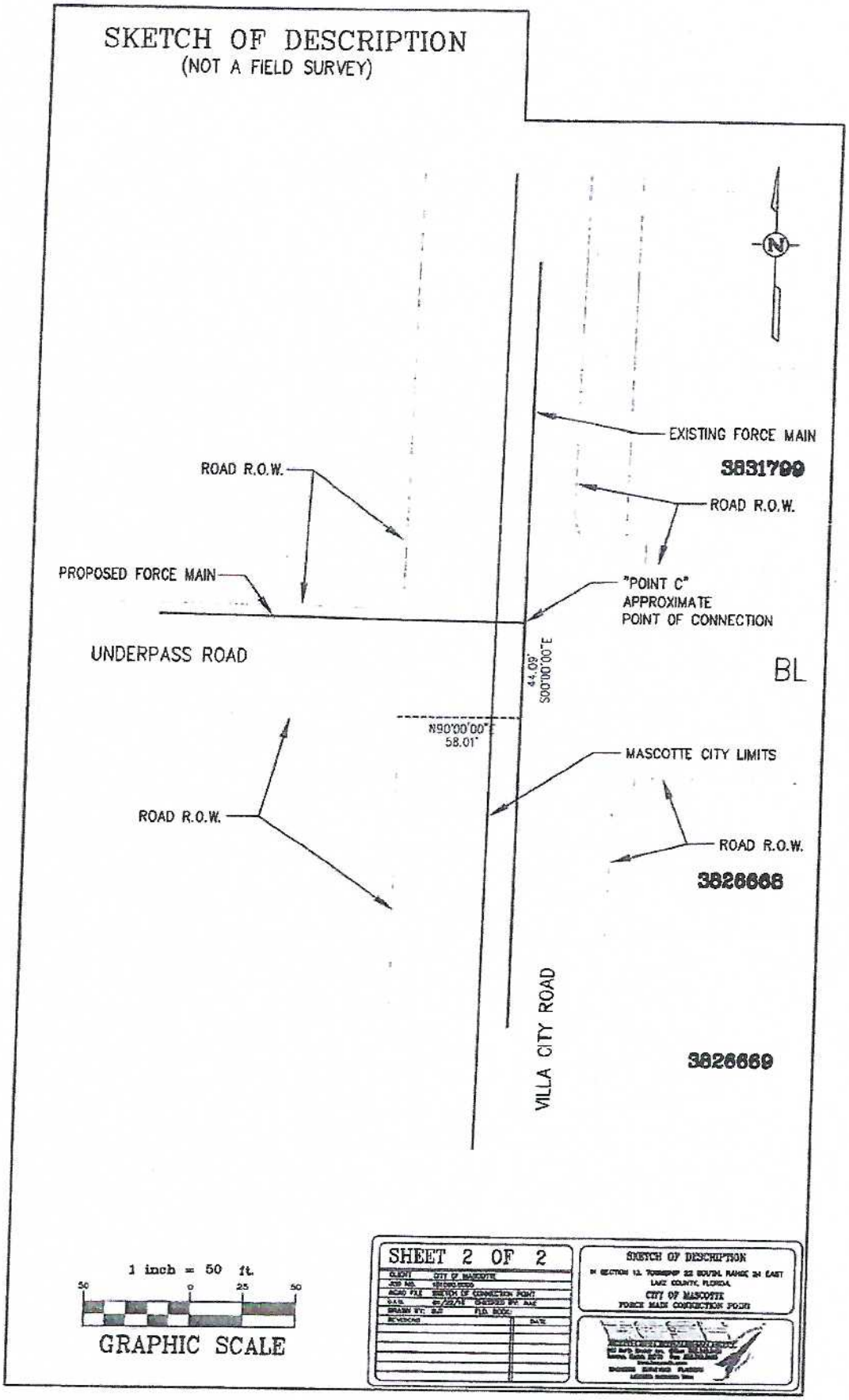
A POINT LYING NEAR THE EASTERLY LIMITS OF THE CITY OF MASCOTTE, CLOSE TO THE INTERSECTION OF GROVELAND FARMS ROAD AND EAST MYERS BOULEVARD.

SAID POINT BEING LOCATED NEAR THE SOUTHWEST CORNER OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 24 EAST.

ALSO DESCRIBED AS:
BEGIN AT THE SOUTHWEST CORNER OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 24 EAST AND RUN NORTH ALONG THE WEST LINE OF SAID SECTION APPROXIMATELY 16.5 FEET THEN EAST A DISTANCE OF APPROXIMATELY 6.5 FEET TO POINT "B" AND THE END OF THIS DESCRIPTION.

GENERAL NOTES

1. This is NOT A BOUNDARY SURVEY.
2. This sketch is to show existing site information and improvements for the sole purpose of conceptual design.
3. This sketch was prepared for the City of Mascotte and its assigns as there interests may appear. Use of this sketch by any other parties is strictly forbidden.
4. Use of the sketch shown on sheet 2 for any other purpose than that stated in note (2) is the sole responsibility of the user.
5. All information outside the labeled limits of this site is for general reference purposes only. Assumption of correctness outside of said site boundary is the liability of the user.
6. The bearings, shown heron, are relative to assumed datum and are based on Geographic Information System (GIS) data obtained from Lake County, Florida.
7. This sketch was prepared by C&D Engineering, Inc. for the City of Mascotte.
8. This sketch contains 2 sheets in which NONE are valid without all remaining sheets.


SKETCH OF DESCRIPTION
(NOT A FIELD SURVEY)
N
EXISTING FORCE MAIN
3831799
ROAD R.O.W.
ROAD R.O.W.
PROPOSED FORCE MAIN
"POINT C"
APPROXIMATE
POINT OF CONNECTION
UNDERPASS ROAD
BL
44.09'
S00°00'00"E
N90°00'00"E
58.01'
MASCOTTE CITY LIMITS
ROAD R.O.W.
ROAD R.O.W.
3826668
VILLA CITY ROAD
3826669
1 inch = 50 ft.
50 0 25 50
GRAPHIC SCALE
SHEET 2 OF 2
SKETCH OF DESCRIPTION
CITY OF MASCOTTE
FORCE MAIN CONNECTION POINT

City of Leesburg Interlocal Agreement

RESOLUTION NO. 9135

RESOLUTION OF THE CITY COMMISSION OF THE CITY OF LEESBURG, FLORIDA AUTHORIZING THE MAYOR AND CITY CLERK TO EXECUTE AN INTERLOCAL AGREEMENT WITH THE CITY OF MASCOTTE FOR PROVISION OF WASTEWATER SERVICES; AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF LEESBURG, FLORIDA:

THAT the Mayor and City Clerk are hereby authorized to execute an interlocal agreement with the City of Mascotte whose address is 100 East Myers Boulevard, Mascotte, Florida 34753 for Wastewater Services.

THAT this resolution shall become effective immediately.

PASSED AND ADOPTED by the City Commission of the City of Leesburg, Florida, at a regular meeting held the Seventeenth day of December, 2012.

Sanna Henderson
Mayor

ATTEST:

Billy M Richardson
City Clerk

INTERLOCAL AGREEMENT BETWEEN THE CITY OF LEESBURG AND THE CITY OF MASCOTTE FOR PROVISION OF WASTEWATER SERVICES

THIS AGREEMENT is entered into between the **CITY OF LEESBURG, FLORIDA** (hereafter referred to as "Leesburg"), and **THE CITY OF MASCOTTE, FLORIDA** (hereafter referred to as "Mascotte").

WHEREAS, Leesburg and Mascotte have agreed to enter into an Interlocal Agreement for the purpose of specifying the terms and conditions under which Leesburg will accept from Mascotte wastewater from Mascotte's wastewater system, and treat that wastewater in Leesburg's wastewater treatment plants, and

WHEREAS, Chapter 163, Part I of the Laws of Florida provides for and directs the cooperation between local governments to engage in joint efforts that results in the welfare of their citizenry, and

WHEREAS, the City of Leesburg maintains wastewater treatment plants for the benefit of its own citizens which have the capacity to treat a certain quantity of wastewater from Mascotte, and

WHEREAS, the acceptance and treatment by Leesburg of wastewater generated within the municipal limits of Mascotte will benefit the citizens of Mascotte and the public at large by providing a method of wastewater disposal other than septic tanks, thereby reducing environmental pollution;

NOW THEREFORE, the parties do hereby agree as set forth below:

1. The recitals above are true and correct and are incorporated into this Agreement as an integral part.

2. Subject to the terms, conditions and limitations contained in this Agreement, Leesburg shall accept wastewater from Mascotte for treatment and disposal at Leesburg's wastewater treatment plants. Leesburg shall not be obligated to accept from Mascotte any more than 125,000 gallons per day of wastewater. Acceptance by Leesburg of wastewater in excess of this limitation shall not constitute an amendment to this Agreement, shall not obligate Leesburg to continue accepting wastewater in excess of this limitation, and shall not act as a waiver of Leesburg's right to enforce this limitation at any time, regardless of the length of time during which Leesburg may accept wastewater exceeding the limit imposed by this Agreement.

3. Mascotte shall pay to Leesburg, in the manner specified in this Agreement, the sum of $4.71 per 1,000 gallons of wastewater accepted by Leesburg from Mascotte for treatment and disposal. This is an "Intergovernmental Rate" which is exclusive to Mascotte, based on conditions that are unique and specific to Mascotte. No other person or entity (whether public or private) from whom or which Leesburg accepts wastewater shall be eligible for this

Intergovernmental Rate nor shall it be considered to have established any standard or precedent for rates Leesburg may charge to other persons or entities desiring that Leesburg accept their wastewater for treatment. Furthermore, the assent by Leesburg to accept wastewater from Mascotte shall not be construed to obligate Leesburg to accept, or consider accepting, wastewater from other sources.

4. The Intergovernmental Rate shall be subject to adjustment on an annual basis by Leesburg. Written notice of each rate change shall be given by Leesburg to Mascotte by no later than March 31 each year, for implementation effective the following October 1 in each year. The first rate change notice shall be given on or before March 31, 2013. The adjustment shall be based upon the gross domestic implicit price deflator index published for the third quarter of each calendar year. In no case shall the rate be reduced.

5. Mascotte shall, at its sole expense, construct or cause to be constructed by developers or other third parties, the sanitary sewer force main to transmit wastewater from Mascotte's collection system to Leesburg's existing force main at the location shown as "Point B" on Exhibit "A" attached and incorporated herein. Mascotte shall also, at its sole expense, construct or cause to be constructed by developers or other third parties, the collection system to collect and transmit wastewater from individual homes, businesses and other customers of Mascotte, to the force main which will in turn transmit the wastewater to Leesburg's existing force main.

6. Mascotte shall submit to Leesburg all development plans within the City of Mascotte which involve connection to the Leesburg-owned sewer system for review and approval prior to approval by Mascotte. All sewer design plans and systems constructed by or under the direction of Mascotte which will fall under Leesburg's operation and maintenance jurisdiction must meet all the standards and requirements of Leesburg and other governmental agencies with jurisdiction, and must be inspected and approved by Leesburg before connection to Leesburg's own system.

7. The parties agree on a "Demarcation Point" as illustrated and described as "Point A" on Exhibit "A" attached and incorporated herein. Mascotte shall be responsible, financially and otherwise, for operation and maintenance of the wastewater system on its side of the Demarcation Point. Leesburg shall be responsible, financially and otherwise, for operation and maintenance of the wastewater system on its side of the Demarcation Point.

8. Each customer of Mascotte connecting to the wastewater system must pay a wastewater impact fee to Leesburg, in the same amount as a comparable customer of Leesburg would have to pay to connect to its system. Such impact fees shall be collected by Mascotte and submitted to Leesburg no later than the 30th day of the month when the impact fees are collected. Mascotte may impose an additional administrative fee from payors of impact fees and retain such fee prior to submittal of impact fees to Leesburg. The amount of the impact fees may be adjusted annually by Leesburg. Adjustments shall take effect ninety (90) days after formal notification to Mascotte from Leesburg of the adjustment. The amount, time of payment and other aspects of the impact fee shall be governed by Leesburg's ordinances on that subject, as they may be amended from time to time, however no customer of Mascotte shall be required to pay an impact fee in excess of the fee Leesburg imposes on its own customers.

9. Should the collection of impact fees on behalf of the City of Leesburg result in any demand, claim, or enforcement action against Mascotte, whether or not such action results in formal or informal mediation, arbitration, or commencement of litigation, Leesburg shall defend and hold harmless the City of Mascotte, including payment of any costs, expenses, and attorney fees. However, Leesburg shall not hold Mascotte harmless for the collection of any administrative fees associated with impact fees which are imposed by Mascotte.

10. Leesburg's permit for its wastewater treatment plants requires that it adopt an Industrial Pretreatment program and an Oil and Grease Management program applicable to its customers. All customers of Mascotte shall be subject to these same standards and requirements. Leesburg also has a Sewer Use Ordinance which will apply to Mascotte's customers. Mascotte shall consider adopting similar ordinances applicable to Mascotte customers which shall be no less stringent than Leesburg's Industrial Pretreatment and Oil and Grease Management programs and Sewer Use Ordinance. Mascotte shall not be permitted to make final connection to the Leesburg sewer system unless or until Mascotte has adopted a Sewer Use Ordinance acceptable to Leesburg, which Ordinance shall include regulations regarding Industrial Pretreatment and Oil and Grease Management. If or when Mascotte adopts its own ordinances, or amends such ordinances in the future, it shall notify Leesburg within thirty (30) days of adoption. Mascotte shall cooperate with Leesburg in enforcing all standards and requirements imposed by Leesburg on wastewater from its own customers. In the event that Mascotte adopts its own ordinances which are substantially similar to those of Leesburg, Mascotte shall initiate enforcement action as specified by Leesburg if any customer violates these requirements and standards. Mascotte shall initiate enforcement action no more than five (5) business days after written notice from Leesburg to Mascotte of the existence or occurrence of the violation.

11. In the event that Leesburg proposes to amend its Industrial Pretreatment program, Oil and Grease Management program, or Sewer Use Ordinance, or adopt or amend any other resolutions or ordinance affecting wastewater treatment service to Mascotte, Leesburg shall notify Mascotte at least thirty (30) days in advance of adoption of the proposed ordinance or resolution. Mascotte agrees to implement such requirement contained therein at least thirty (30) days of the notice.

12. Mascotte shall be responsible for notifying sewer customers within the City of Mascotte of any rate changes as required by general law. This requirement also relates to sewer system improvements, connection and impact fees, rate changes, and other related items.

13. Mascotte agrees to work with Leesburg in establishing a system whereby messages and notifications may be delivered to sewer customers within the City of Mascotte.

14. Leesburg will invoice Mascotte on a monthly basis for the amount due for treatment and disposal of Mascotte's wastewater. The amount to be billed shall be based on Mascotte's billed water consumption for each of its water customers who are connected to the wastewater system, and Mascotte will be billed based on aggregate billed water consumption for all of its wastewater customers. Mascotte shall furnish billed water consumption for its wastewater customers to Leesburg on a monthly basis and on the same schedule that Mascotte issues bills for the water consumption to its customers. Payment will be due to Leesburg no later than twenty (20) days after the invoice is rendered, regardless of whether Mascotte has collected

the amounts due for wastewater service from each of its customers. Payment will be considered delinquent, and Mascotte will be considered in default under this Agreement, if payment is not received by Leesburg by the twentieth (20^{th}) day after the invoice is rendered. Leesburg shall be paid first from amounts collected by Mascotte for wastewater service from its customers, before such revenues are utilized for any other purpose whatsoever.

15. If Mascotte defaults in payment under the standards specified in Paragraph 14 above, Leesburg may exercise any one or more of the following remedies:

A. Submit an invoice to Mascotte for interest at the rate of 10% of the delinquent amount from the date of default;

B. Terminate further acceptance of wastewater from Mascotte until all sums owed to Leesburg have been paid in full, with interest at the rate of 10% per year from the date of default through the date of payment;

C. Subject to paragraph 19 herein, file suit against Mascotte in a court of competent jurisdiction in Lake County, Florida, to collect the past due amount with interest as stated above, together with all court costs and reasonable attorneys' fees incurred in the collection process, both before and after suit is filed;

D. Commence billing Mascotte's customers directly for wastewater services in months subsequent to the default, and retain all such revenues until the entire amount due Leesburg, with interest, has been paid in full, and thereafter retaining all such revenues up to the amount due Leesburg each month, remitting any excess to Mascotte once Leesburg is paid in full;

E. Require Mascotte to post a surety bond, cash deposit or letter of credit in favor of Leesburg, equal to the average of the amounts billed to Mascotte by Leesburg over the six (6) month period preceding the default (or if the default occurs before there have been six (6) months of bills rendered, an average of all bills through the date of default). If Leesburg elects to require a bond, deposit or letter of credit, such surety shall remain in effect for a period of not less than twelve months after Mascotte has paid all past due amounts to Leesburg in full.

16. Both parties to this Agreement agree not to discriminate against any person on the basis of race, religion, national origin, age, sex, disability, or marital status in the use of facilities pursuant to this Interlocal Agreement.

17. The Initial Term of this Agreement shall be five (5) years from the effective date of this Agreement. This Agreement shall be effective upon final adoption of an ordinance or resolution (as each may require) by both Leesburg and Mascotte. The Effective Date shall be the date of final adoption by the last party.

18. This Agreement may not be terminated by either party prior to its expiration, unless an amendment to the Agreement is approved by both Leesburg and Mascotte, in writing, or if one party is in breach of any of the terms and conditions of this agreement and fails to

correct it within thirty (30) days after written notice unless it requires more than thirty (30) days to make such corrections, and in such case the breach shall be cured within a reasonable time.

19. In the event of any dispute related to this Agreement, the parties agree to resolve the dispute consistent with the conflict resolution procedures established in Chapter 164, *Florida Statutes*. If there is a failure to resolve the conflict, no later than 30 days following the conclusion of the procedures established in chapter 164, a party may file an action in circuit court.

20. All notices, consents, approvals, waivers, and elections that either party requests or gives under this Agreement must be in writing and shall be given only by hand delivery, or by certified mail, prepaid with confirmation of delivery requested. Notices shall be delivered or mailed to the addresses and parties set forth below or as any party may otherwise designate in writing.

City of Leesburg:	City Manager Post Office Box 490630 Leesburg, Florida 34749
City of Mascotte:	City Manager 100 East Myers Boulevard Mascotte, Florida 34753

21. This Agreement is solely for the benefit of the parties hereto, and no right or cause of action shall accrue upon or by reason hereof, to or for the benefit of any third party. Nothing in this Agreement, either expressed or implied, is intended or shall be construed to confer upon or give any person, corporation or governmental entity other than the parties any right, remedy or claim under or by reason of this Agreement or any provisions or conditions hereof, and all the provisions, representations, covenants, and conditions herein contained shall insure to the sole benefit of and shall be binding upon the parties, and their respective representatives, successors and assigns. In particular, and without limiting the generality of the foregoing, individual customers of Mascotte are not intended as third party beneficiaries of this Agreement, and shall have no standing to enforce this Agreement or to assert any claim against Leesburg which arises out of or is related any way to this Agreement or the services provided by Leesburg under this Agreement.

22. Each represents and warrants for the benefit and reliance of the other its respective authority to enter into this Agreement, and acknowledges the validity and enforceability of this Agreement. The parties hereby represent, warrant and covenant this Agreement constitutes a legal, valid and binding contract enforceable by the parties in accordance with its terms and conditions, and that the enforceability is not subject to any impairment by the applicability of any public policy or police powers.

23. This Agreement sets forth the entire understanding of the parties with regard to its subject matter. It supersedes and takes precedence over any and all prior negotiations, representations and agreements, oral or written, all of which are deemed to have merged into this Agreement and to have been extinguished except to the extent specifically set forth herein. This Agreement may not be amended orally, by implication, by course of conduct, or in any other

manner whatsoever than by way of a written instrument signed by both parties hereto or their lawful successors. This Agreement shall be construed in accordance with the laws of Florida and venue for any action or proceeding arising out of this Agreement shall be in Lake County, Florida. This Agreement shall be binding on the parties hereto, as well as on their lawful successors and assigns. Each party represents for the benefit of the other that it has not entered into this Agreement in reliance on, or on the basis of, any promise, negotiation, representation, undertaking or agreement of the other party, oral or written, which is not specifically set forth within this Agreement.

24. If any portion of this Agreement is declared invalid or unenforceable, then to the extent it is possible to do so without destroying the overall intent and effect of this Agreement, the portion deemed invalid or unenforceable shall be severed here from and the remainder of this Agreement shall continue in full force and effect as if it were enacted without including the portion found to be invalid or unenforceable.

25. This Agreement shall be recorded in the Public Records of Lake County, Florida, as required by applicable Florida Statutes.

IN WITNESS WHEREOF, each of the parties has caused its duly authorized representatives to set their hands to this Agreement on the dates indicated below.

THE CITY OF LEESBURG, FLORIDA

BY: Sanna Henderson
SANNA HENDERSON, Mayor

ATTEST: Betty Richardson
BETTY RICHARDSON, City Clerk

APPROVED AS TO FORM AND CONTENT:

CITY ATTORNEY

Witnesses:

Print Name: Raymond S. SHARP

Print Name: J. Douglas Drymon

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me this 17th day of DECEMBER, 2012, by Sanna Henderson, as Mayor of the City of Leesburg, Florida, who executed the foregoing instrument and acknowledged before me that he executed the same for the uses and purposes therein expressed, and who is personally known to me.

Julie R Purvis
Notary Public

SEAL

JULIE R. PURVIS
Type or Print Name

My Commission Expires:

[THE REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK]

THE CITY OF MASCOTTE, FLORIDA

BY: _____
TONY ROSADO, Mayor

ATTEST: Michelle Hawkins
MICHELLE HAWKINS, CMC,
City Clerk

Witnesses:

_____
Print Name: James P Gleason

_____
Print Name: Amy McLean

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me this 3rd day of December 2012, by Tony Rosado, as Mayor of the City of Mascotte, Florida, who executed the foregoing instrument and acknowledged before me that he executed the same for the uses and purposes therein expressed, and who is personally known to me.

_____
Notary Public

SEAL

Stephanie Cabrams
Type or Print Name

My Commission Expires: 02-09-2013

EXHIBIT "A"

DESCRIPTION : POINT "A"

A POINT LYING ON THE NORTHERLY BOUNDARY LINE OF THE CITY OF MASCOTTE UTILITIES SERVICE DISTRICT AS DESCRIBED IN ORDINANCE No. 203-01-332 CITY OF MASCOTTE, LAKE COUNTY, FLORIDA.
SAID POINT BEING LOCATED AT THE INTERSECTION OF THE EASTERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 33, (C.R. 33) ON THE NORTH LINE OF SECTION 10, TOWNSHIP 21 SOUTH, RANGE 24 EAST.
ALSO DESCRIBED AS:
BEGIN AT THE NORTHEAST CORNER OF SECTION 10, TOWNSHIP 21 SOUTH, RANGE 24 EAST, AND RUN WEST ALONG THE NORTH LINE OF SAID SECTION, TO THE EASTERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 33 (C.R. 33), AS DEPICTED IN THE FLORIDA DEPARTMENT OF TRANSPORTATION MAINTENANCE MAP, SECTION 11020, DATED 12-21-1981, A DISTANCE OF 2,393 FEET MORE OR LESS, TO POINT "A" AND THE END OF THIS DESCRIPTION.

DESCRIPTION : POINT "B"

A POINT BEING LOCATED AT THE INTERSECTION OF THE EASTERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 33, (C.R. 33) AND THE NORTH LINE OF THE 170 FOOT WIDE FLORIDA POWER EASEMENT LYING IN THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 22, TOWNSHIP 20 SOUTH, RANGE 24 EAST.
ALSO DESCRIBED AS:
BEGIN AT THE SOUTHEAST CORNER OF SECTION 22, TOWNSHIP 20 SOUTH, RANGE 24 EAST, AND RUN WEST ALONG THE SOUTH LINE OF SAID SECTION, TO THE EASTERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 33 (C.R. 33), AS DEPICTED IN THE FLORIDA DEPARTMENT OF TRANSPORTATION MAINTENANCE MAP, SECTION 11020, DATED 12-21-1981, A DISTANCE OF 2,603 FEET MORE OR LESS; THENCE RUN NORTH ALONG SAID EASTERLY RIGHT-OF-WAY LINE, TO THE NORTHERLY LINE OF THE 170' FOOT WIDE FLORIDA POWER EASEMENT AS DESCRIBED IN OFFICIAL RECORDS BOOK 297, PAGE 209, A DISTANCE OF1,777 FEET MORE OR LESS, TO POINT "B" AND THE END OF THIS DESCRIPTION.

GENERAL NOTES

1: This is NOT A BOUNDARY SURVEY.

2: This sketch is to show existing site information and improvements for the sole purpose of conceptual design.

3: This sketch was prepared for the City of Leesburg and its assign's as there interests may appear. Use of this sketch by any other parties is Strictly forbidden.

4: Use of this sketch shown on sheet 2 for any other purpose than that stated in note (2) is the sole responsibility of the user. The City of Leesburg assumes no liability for the misuse of this information.

5: All information outside the labeled limits of this site is for general reference purposes only. Assumption of correctness outside of said site boundary is the liability of the user.

6: The Bearings, shown hereon, are relative to assumed datum and are Based on the Description as described in the City of Mascotte, Ordinance No. 2003-01-322, creating "The City of Mascotte Utilities Service District", Lake County, Florida.

7: This sketch was prepared by the City of Leesburg, Public works Department, Engineering Division, under the direction of Adrian Parker, CPM / Development Review Coordinator. for the City of Leesburg.

8: This sketch contains 2 sheets in which NONE are valid without all remaining sheets.

I Ray Sharp HAVE REQUESTED THE INFORMATION DEPICTED HERON AND ACKNOWLEDGE RECEIPT OF THE INFORMATION AND IT IS SATISFACTORY FOR MY NEEDS AS OF THE DATE OF THIS SIGNATURE.

NAME:_____ DATE:_____

Department Director, Environmental Service, for the City of Leesburg.

SECTION: 22-20-24

CITY OF LEESBURG
PUBLIC WORKS DEPT.
ENGINEERING DIVISION
550 S. 14th ST. - P.O. BOX 490630
LEESBURG, FLORIDA 34749
PHONE (352) 728-9755
FAX (352) 728-9879

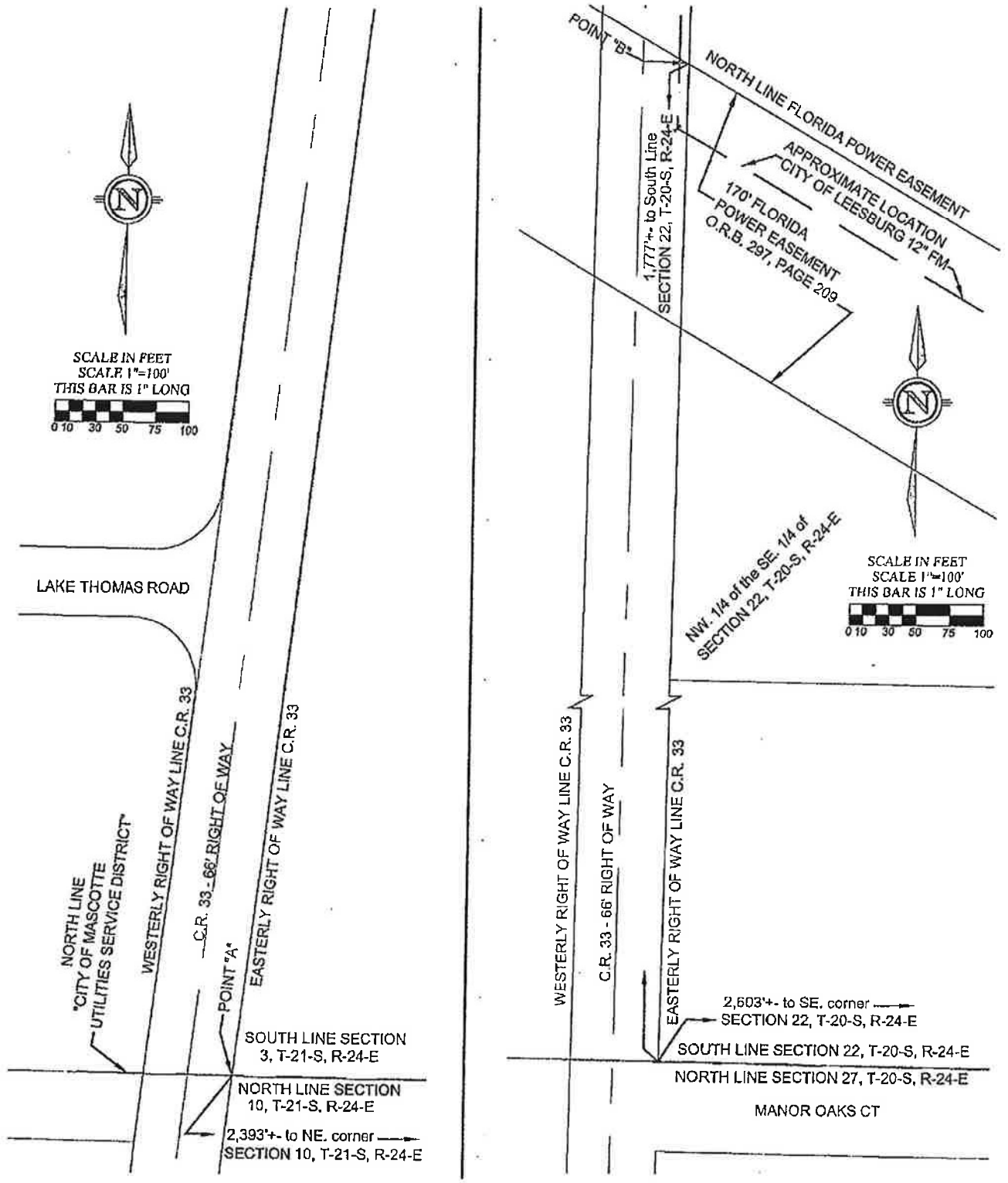
SKETCH OF DESCRIPTION

MASCOTTE UTILITIES SERVICE DISTRICT
and the CITY OF LEESBURG

DATE: 06/07/2012
DRAWN: DDF
CHECKED: AP
APPROVED: RS
SCALE: NTS
FILE NO.: LE12002

SHEET NUMBER 1 OF 2

EXHIBIT "A"



CITY OF LEESBURG
PUBLIC WORKS DEPT.
ENGINEERING DIVISION
550 S. 14th ST. - P.O. BOX 490630
LEESBURG, FLORIDA 34749
PHONE (352) 728-9755
FAX (352) 728-9879

SKETCH OF DESCRIPTION

MASCOTTE UTILITIES SERVICE DISTRICT
and the CITY OF LEESBURG

DATE:	06/07/2012
DRAWN:	DDF
CHECKED:	AP
APPROVED:	RS
SCALE:	1" = 100'
FILE NO.:	LE12002

SHEET NUMBER 2 OF 2

APPENDIX C: COST AND EFFECTIVENESS CERTIFICATION AND WATER/ENERGY CONSERVATION CERTIFICATION

APPENDIX D: SITE CERTIFICATION FORM

AUTHORIZED REPRESENTATIVE'S SITE CERTIFICATION

Project Number _____

Project Description Collection system improvements: includes installation of new force mains proposed to be upgraded in existing right-of-ways, and upgrades to existing lift stations (Groveland . Interconnect Lift Station and Woodbury Lift Station.

I do hereby certify as to the following:

1. City of Mascotte has acquired all real property or real property rights that are or will be, required for the construction, operation and maintenance of the Project described above.

2. All real property and real property rights required for the entire Project were acquired in accordance with the State and local requirements.

Dated this _____ day of _____ , 20 _____

_____
Signature of Authorized Representative

Larry Walker
Name (print)

Public Services Director
Title

AUTHORIZED REPRESENTATIVE'S LIMITED SITE CERTIFICATION
(Acquisition of Real Property Rights)

Project Number _____

Project Description Collection system improvements: includes eight (8) new lift stations.

I do hereby certify as to the following:

1. City of Mascotte has acquired all real property or real property rights that are or will be, required for the construction, operation and maintenance of the Project described above.

2. All real property and real property rights required for the entire Project were acquired in accordance with the State and local requirements.

Dated this _____ day of _____ , 20 21

_____
Signature of Authorized Representative

Larry Walker
Name (print)

Public Services Director
Title

Describe pending easement(s) and/or right-of-way acquisition, reasons for inability to obtain real property rights, and date that clear site certification will be provided.

The City has agreements with several developers while other agreements are pending. The status of each developer agreement is listed in the attached table.

Development Agreement Summary

Development	Agreement in Place	Date of Agreement	Estimated Date of Site Certification[1]
Roper Trails	Y	10/24/2018	June 2024
Indigo Lakes (River Meadows)	Y	2/5/2019	December 2025
Heron's Glen	Y	3/1/2021	December 2025
Sunset Lakes Estates	Y	3/31/2021	June 2024
Villa Pass	Y	3/31/2021	June 2024
BL Investments	N	TBD	December 2027
Gardens at Lake Jackson Estates (KB Homes)	N	TBD	December 2027
Langley Property	N	TBD	December 2027

Notes:

1.) Site Certification is contingent upon developer agreement recording and dependent on the timing of construction. Per the City's existing developer agreements, all easements must be taken and incorporated into the final construction plans prior to the commencement of construction.

APPENDIX E: USFWS INFORMATION FOR PLANNING AND CONSULTATION (IPAC) REPORTS

United States Department of the Interior

FISH AND WILDLIFE SERVICE
North Florida Ecological Services Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517
Phone: (904) 731-3336 Fax: (904) 731-3045

IPaC Record Locator: 259-104451236 August 06, 2021

Please provide this document to the Federal agency or their designee with your loan/grant application.

Subject: Consistency letter for the project named 'City of Mascotte Clean Water Improvements' for specified threatened and endangered species that may occur in your proposed project location, pursuant to the IPaC determination key titled 'Clearance to Proceed with Federally-Insured Loan and Grant Project Requests'.

To whom it may concern:

On August 03, 2021, Morgan French used the IPaC determination key 'Clearance to Proceed with Federally-Insured Loan and Grant Project Requests'; dated December 29, 2020, in the U.S. Fish and Wildlife Service's online IPaC tool to evaluate potential impacts to listed species from a project named 'City of Mascotte Clean Water Improvements' in Lake and Sumter counties, Florida (shown below):

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@28.61762465,-81.91109765018355,14z

The following description was provided for the project 'City of Mascotte Clean Water Improvements':

The City of Mascotte, located in Lake County, Florida, sits directly west of the City of Groveland on State Road 50 in Lake County, Florida. The state has committed to expanding State Road 50 for the purposes of economic development and improved evacuation routes. As part of Orlando's continued growth and expansion to the West, nearby communities such as Clermont and Groveland have seen exponential growth over the last decade. Mascotte may be poised for similar growth as developers seek more affordable land within commuting distance to Orlando. The planning area incorporates 41 square miles and includes the City of Mascotte and contiguous surrounding lands in Lake County. The City of Mascotte does not have central sewer. The City has a couple of small developments connected to an active sewer system that is sent to the City of Groveland for wastewater treatment. The City currently has an interlocal agreement with the City of Groveland and the City of Leesburg to provide wastewater treatment, however there is no current connection to the City of Leesburg system. The City also has an inactive (dry) sewer system within four residential developments.

The recommended upgrades to the collection system include eight (8) new duplex lift stations to handle flows from the proposed developments and existing developments with dry sewers. With the expected increase in flows, it is recommended that the existing Groveland Lift Station be upgraded to increase the capacity, including installing larger pumps. The Groveland Lift Station will require upsizing the wet well and providing an onsite backup generator as well. Flows from developments in the north of the City will be directed to a master pumping station (Lift Station 8) on the eastern border of the City, adjacent to the proposed Langley Development. A new interconnect will also be located just downstream of Lift Station 8 the lift station and flows will be conveyed to the proposed new Groveland WWTP. The remaining flows, including those the dry sewer connections, will flow through the Groveland Lift Station.

Over ten (10) miles of force mains will be needed to convey flows from the developments for treatment in Groveland. This includes new force mains from the developments, a force main to the future Groveland WWTP, and upsizing the existing force main along SR-50 tying into the existing interconnect.

It is recommended that wastewater treatment and disposal for the City continue to be accomplished through an Interlocal Agreement with the City of Groveland. This recommendation requires an amendment to the existing Interlocal Agreement. This amendment should include a revision of the existing agreement to increase the quantity of accepted flows to at least 1.37 MGD to meet the projected wastewater flows. This increase will likely come with an adjusted fee for treatment and disposal, or "Intergovernmental Rate," and should be negotiated between the two cities.

Additionally, it is expected that the City will be absorbing some of the cost of the proposed Groveland WWTP. It is assumed that the City buy-in fee from

Groveland will be a set price, on an EDU basis, and will be established through discussions between the two cities' governing authorities.

It is recommended that the SCADA system be completely replaced. The existing SCADA system consists of a proprietary control system and software, but by replacing this system, it allows for more flexibility to system modifications in the future. Since the collection system is comprised of mostly newly installed stations and equipment, only the system at the Groveland Lift Station will require full replacement. This includes adding RTUs to the remote SCADA panels and replacing the motor control panel, flow meter, and instruments.

Construction Schedule:
Phase 1 : Start 03/2024; Complete 09/2025
Phase 2 : Start 01/2026; Complete 01/2028
Phase 3: Start 01/2028; Complete 01/2030

Based on your answers provided, the proposed project is unlikely to have any detrimental effects to federally-listed species or critical habitat. Therefore, per this guidance, Morgan French has determined that City of Mascotte Clean Water Improvements will have No Effect on the species listed below.

This letter serves as documentation of your consideration of endangered species, bald eagles, and migratory birds. No further coordination with the Service is necessary.

Please be advised that, if later modifications are made to the project that do not meet the criteria described above, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Birds

- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Everglade Snail Kite *Rostrhamus sociabilis plumbeus* Endangered
- Wood Stork *Mycteria americana* Threatened

Flowering Plants

- Britton's Beargrass *Nolina brittoniana* Endangered
- Cooley's Water-willow *Justicia cooleyi* Endangered
- Florida Bonamia *Bonamia grandiflora* Threatened
- Lewton's Polygala *Polygala lewtonii* Endangered
- Papery Whitlow-wort *Paronychia chartacea* Threatened
- Pigeon Wings *Clitoria fragrans* Threatened
- Pygmy Fringe-tree *Chionanthus pygmaeus* Endangered
- Scrub Buckwheat *Eriogonum longifolium var. gnaphalifolium* Threatened
- Scrub Plum *Prunus geniculata* Endangered
- Wide-leaf Warea *Warea amplexifolia* Endangered

Reptiles

- Eastern Indigo Snake *Drymarchon corais couperi* Threatened
- Gopher Tortoise *Gopherus polyphemus* Candidate
- Sand Skink *Neoseps reynoldsi* Threatened

Additional considerations for non-federally listed species

- **Bald Eagle Nest Issues.** If any of the above-referenced activities (rehabilitation, demolition, or rebuilding) are proposed to occur **within 660 feet** of an active or alternate bald eagle (*Haliaeetus leucocephalus*) nest during the nesting season (October 1 through May 15), we recommend the applicant or their designated agent coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) at http://rnvfwc.com/license/wildlife/proteeted-wildlife/eagle-permits/. Guidance will be provided by the FWC regarding monitoring options or other suggestions regarding construction timing relative to the distance the project is located to the bald eagle's nest and according to any vegetative buffers that may be present between the nest and the construction activities.
- **Migratory Bird Issues.** If any native birds are using the structures for nesting then actions should be taken so as not to disturb the adults, nests, eggs, or chicks as this could lead to a potential violation of the Migratory Bird Treaty Act. If nests are present or any birds are using the structures regularly for roosting purposes, we recommend the applicant or their designated agent coordinate with the appropriate Service office and FWC (http://rnyfwc.com/license/wildlife/protected-wildlife contacts/) so that impacts can be avoided and minimized.

Morgan French answered the determination key questions for this project as follows:

1. Is the project entirely within the State of Florida, but **not** within Monroe County?

   Automatically answered
   Yes

2. Is the project exclusively a Federal loan transfer, where the original lending or mortgage institutions for existing project are no longer holding the loan and the property is being transferred via a federally-backed loan?

   *Yes, this is **exclusively** a Federal loan transfer, as described above.*

Attachments:

- Project questionnaire
- Standard manatee construction conditions
- Determination key description: Clearance to Proceed with Federally-Insured Loan and Grant Project Requests
- U.S. Fish & Wildlife Service contact list

Project Informational Questionnaire

As part of completing the determination key, Morgan French provided the following information about their project:

1. Which Federal Agency is the lead agency providing the funding?

   Florida Department of Environmental Protection

2. Which types of activities you will be conducting:

   Utilities

3. Which types of structures this funding will address:

   Clean Water Utilities

4. How many square feet of facilities will be affected by this project?

   23958

5. Are there bald eagles within 660 feet of the site, or migratory birds or bats using structures on the site?

   None of the above

Determination Key Description: Clearance To Proceed With Federally-Insured Loan And Grant Project Requests

This key was last updated in IPaC on December 29, 2020. Keys are subject to periodic revision.

This determination key is for all Federally-insured loans, loan transfers, or grant requests for projects that may be completed without requiring additional clearing of undisturbed habitat beyond the original footprint of the existing project. For the purposes of this key, Federal loan transfers are those transfers where the original lending or mortgage institutions for existing projects are no longer holding the loans and the properties are being transferred via federally backed loans. Projects may include demolition, rehabilitation, renovations, and/or rebuilding of existing structures (*e.g.*, commercial buildings, multi-family housing, single-family housing), and various utilities projects such as water and wastewater treatment facilities, sewer or power line repair, etc.

The U.S. Fish and Wildlife Service is the lead Federal agency charged with the protection and conservation of Federal Trust Resources, such as threatened and endangered species and migratory birds, in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.), the Bald and Golden Eagle Protection Act, (16 U.S.C. 668-668d) (Eagle Act), and the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 701 et seq.).

Recently, many Federal agencies have activated programs that have resulted in an increased consumer demand to initiate projects through federally-backed loans and grants, all of which require those same Federal agencies to comply with Section 7 of the Act. Consequently, we have experienced an increase in the number of requests for review of these government-backed loan and grant projects. These include, but are not limited to:

1. U.S. Department of Housing and Urban Development’s (HUD) Neighborhood Stabilization and Community Development Block Grant programs, which may be managed by Florida’s Department of Economic Opportunity;

2. U.S. Department of Energy’s (DOE) Energy Efficiency and Renewable Energy program;

3. U.S. Department of Agriculture’s (USDA) Housing Assistance and Rural Development Loan and Grant Assistance programs;

4. U.S. Federal Aviation Administration (FAA) regulatory airport and runway modifications;

5. U.S. Federal Emergency Management Agency’s (FEMA) Hazard Mitigation Assistance program; and

6. U.S. Environmental Protection Agency’s (EPA) Clean Water State Revolving Fund, managed by Florida Department of Environmental Protection.

In order to fulfill the Act’s statutory obligations in a timely and consistent manner, and to assist Federal agencies, State and local governments, and consultants in addressing Section 7 and National Environmental Policy Act (NEPA) environmental impact review requirements, we provide the following guidance and clearance relative to the criteria stated below for Federally-insured loan and grant project requests in all cities and unincorporated areas throughout Florida, with the exception of Monroe County.

This guidance is based on the signed letter U.S. Fish and Wildlife Service Clearance to Proceed with Federally-Insured Loan and Grant Project Requests.

U.S. Fish & Wildlife Service Contact List

Determination key office contact information
South Florida Ecological Services Field Office
1339 20th Street
Vero Beach, FL 32960-3559
(772) 562-3909

Offices with jurisdiction over project area
North Florida Ecological Services Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517
(904) 731-3336

APPENDIX F: DETAILED COST INFORMATION FOR THE RECOMMENDED PLAN

Appendix F - Detailed Cost Information for the Recommended Plan

No.	Description			Raw Preliminary Cost
1.1	**Force Mains**			
1.1.1	Force Main Connecting Proposed Developments			$10,439,000
1.1.2	Force Main Connecting Dry Sewered Developments			$2,289,000
1.1.3	Force Main to new Groveland WWTP			$3,094,000
1.1.4	Upsize Existing Force Main to Interconnection to Sampey			$2,156,250
1.1.5	**Total Force Main Cost**			**$17,978,000**
1.2	**Lift Stations**			
1.2.1	Lift Stations for Proposed Developments			$5,260,000
1.2.2	Lift Stations for Dry Sewered Developments			$938,000
1.2.3	Existing Lift Station Retrofit/Upgrades			$657,000
1.2.4	Land Acquisition			$9,000
1.2.5	**Total Pump Station Cost**			**$6,864,000**
1.3	**SCADA Upgrades**			
1.3.2	Base SCADA Equipment Upgrade Cost			$37,000
1.3.3	**Total SCADA Cost**			**$37,000**
Construction, Equipment, Materials, Demolition and Related Procurement Subtotal				**$24,879,000**
2	Construction Contingency	@	10%	$2,488,000
3	Design & Construction Engineering and Inspection	@	18%	$4,926,000
4	Legal, Fiscal, and Administrative	@	3%	$821,000
Tota Base Project Cost without Groveland Buy-In - 2021 Cost				**$33,114,000**
5	Cost for Interlocal buy-in for new WWTP and Sampey WWTP Upgrades in Groveland			$24,016,000
Tota Base Project Cost including Groveland Buy-In - 2021 Cost				**$57,130,000**

APPENDIX G: 2017 COMPREHENSIVE PLAN

City of Mascotte

Comprehensive Plan

Goals, Objectives and Policies

Amended May 2, 2016
Effective June 13, 2016
Ordinance No. 2016-03-543
and
Amended Jan. 17, 2017
Effective February 27, 2017
Ordinance No. 2016-12-550

TABLE OF CONTENTS

ELEMENT A – FUTURE LAND USE

Goal A1: Future Land Use. The City shall maintain a coordinated distribution of land uses to assist in stimulating the economic conditions in the City and proactively plan for timely progressive development within the urban boundaries through the year 2035.

Objective A1-1: *Land Use Categories. The City shall maintain a range of future land use categories to ensure the allocation of coordinated land uses, allow the protection of natural and historic resources, and maximize economic development opportunities in the City.*

Policy A1-1.1: Category Identification. The City hereby adopts the following future land use categories, which shall be depicted on the adopted Future Land Use Map. Objectives A1-3 to A1-17 contain the purpose of each future land use designation and the allowable density and intensity for each.

- Agriculture
- Rural Residential
- Low-Density Residential
- Medium-Density Residential
- High-Density Residential
- Downtown Mixed-Use
- Community Mixed-Use
- Rural Neighborhood Mixed-Use
- Commercial
- Industrial
- Public/Semi-Public
- Recreation and Open Space
- Conservation
- Green Swamp Land Use Designations (as specified in Goal A4)

Policy A1-1.2: Density/Intensity. Unless otherwise noted in this comprehensive plan, the density and intensity figures described in this Future Land Use Element shall apply to gross land area, including wetlands and/or surface waters and required open space. This Policy, however, does not apply to land that lies within the Green Swamp Area of Critical State Concern.

Policy A1-1.3: Open Space. Open Space shall be defined as a portion of the gross land area dedicated to the public, a homeowner's or property owner's association, or the owner of individual small lot developments, unencumbered by any road or other impervious surface, and open from the ground to the sky, to include unfenced dry stormwater retention ponds which are designed as site amenities, buffer areas, and recreation areas. In addition, up to 25% of the required open space for any one project may be comprised of wetland areas and/or surface waters. This Policy, however, does not apply to land that lies within the Green Swamp Area of Critical State Concern.

Policy A1-1.4: Land Development Code. The City shall maintain an adopted matrix within the Land Development Code (LDC) specifying which zoning districts implement each future land use category. The LDC shall further define the allowable uses, densities, and intensities in each zoning district.

***Objective A1-2**: Land Use Compatibility. Future development must be consistent with the adopted Future Land Use Map and existing incompatible uses shall not be allowed to expand and shall be eliminated, when feasible.*

Policy A1-2.1: Inconsistencies. Proposed land use amendments which are inconsistent with the character of the community or inconsistent with adjacent future land uses shall not be approved by the City.

Policy A1-2.2: Redevelopment/Demolition. The City's LDC shall continue to contain provisions that prohibit the repair or rehabilitation of an inconsistent structure that is abandoned or damaged (even if by natural causes) beyond fifty (50) percent of its appraised value and shall require demolition of the structure. Redevelopment of the property will only be allowed if it is consistent with the Future Land Use Map.

Policy A1-2.3: Adequate Services. No future land use plan amendments or changes shall be approved unless adequate public facilities and services, including water supply, are available or will be available to meet projected growth demands.

***Objective A1-3**: Agriculture. The City shall designate land for Agriculture.*

Policy A1-3.1: Purpose of Agriculture Future Land Use Designation. This designation is intended to provide opportunities for agricultural activities and rural residential development to be located on the fringes of the urban areas.

Policy A1-3.2: General Uses. Agriculture-designated areas may include uses such as vegetable farms, livestock ranches, fruit groves, plant nurseries and silvicultural activities, as well as kennels, farm equipment storage and sales, and other more intensive uses based upon location criteria. This designation will also allow for necessary supporting services such as utilities and parklands, and civic facilities.

Policy A1-3.3: Location of Agriculture Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the Agriculture future land use designation and the type of development allowed:

- Raising livestock and commercial farming activities shall not be allowed in the downtown area or adjacent to established residential neighborhoods.
- Agricultural lands should be served primarily by major roads that do not traverse residential neighborhoods.
- Agricultural activities that involve livestock and commercial farming should not be permitted to locate along roadways that serve residential developments that are greater than 1 dwelling unit per acre.
- More intensive agricultural uses, such as kennels and livestock veterinarians, wood chipping, fruit packaging, etc., which create noise, glare or odor that may impact adjacent properties, must provide a buffer and setback large enough to prevent the nuisance from impacting the adjacent properties.
- Agricultural uses should generally be discouraged from locating adjacent to professional office and light retail uses, except for retail and office uses that support the agricultural industry, such as feed and seed stores, hardware, tractor stores, etc.

- Alternative roadways (truck routes) should be proposed to serve agricultural future land use designations if any type of production is proposed that actively requires a truck distribution network for either exporting or importing of goods.
- Annexed properties that do not meet the standards above, may require additional buffering techniques per the Land Development Code, and will not be permitted to expand agricultural activities that would have a negative impact on adjacent uses.

Policy A1-3.4: Density and Intensity. The maximum residential density for land designated Agriculture shall not exceed one dwelling unit per five acres (1 du/5 ac). The maximum intensity of non-residential uses shall not exceed a floor area ratio of 0.10 and an impervious surface area ratio of 0.10.

Policy A1-3.5: Holding Category. The Agriculture future land use category may be used as a holding category for annexed lands that are anticipated for suburban or urban development in the future. These properties would not necessarily be eligible for an agricultural zoning district because of location performance standards. Therefore, they may retain the County zoning designation until their land use classification is changed. A land use category amendment will be required prior to development of more intensive uses.

***Objective A1-4:** Rural Residential. The City shall designate land for Rural Residential.*

Policy A1-4.1: Purpose of Rural Residential Future Land Use Designation. This designation is intended to serve as a transition category between agriculture lands and the more urban residential future land use designations.

Policy A1-4.2: General Uses. Typical uses allowed in Rural Residential include single family detached dwellings and accessory uses, agricultural uses intended to serve the needs of the land owners as opposed to commercial agricultural activities, equestrian stables, and other similar uses. This category also provides for conservation of natural resources by allowing clustering of residential development.

Policy A1-4.3: Development within Rural Residential Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the Rural Residential future land use designation and the type of development allowed:

- Intensive livestock and commercial farming are not encouraged in this land use category. Only horse stables and similar public or private equestrian recreational uses are encouraged in rural residential land use categories.
- Recreational uses, both active and passive, are highly encouraged in rural residential areas.
- Primary and secondary educational uses may locate in the rural residential category if adequate public facilities and access are available.
- The rural land use designation shall encourage clustering of residential development to protect natural resources and open space.
- Commercial uses, other than stables and non-intensive nurseries, are not allowed in rural residential categories.
- On-site wastewater disposal systems (septic tanks or septic system drain fields) will not be permitted for any site that does not have soils that are suitable to accommodate the tanks and protect the environment.

- Rural development in the Rural Residential future land use category will be required to provide potable water and, may be required to provide dry lines or connections to the City's sanitary sewer system as it becomes available.
- If package plants for sewer are proposed, they will be constructed to City standards, deeded to the City for maintenance and designed to be eventually looped into the City's system.

Policy A1-4.4: Density and Intensity. The residential density for land designated Rural Residential shall be a maximum of one dwelling unit per one acre (1 du/1 ac). The maximum intensity of non-residential uses shall not exceed a floor area ratio of 0.3.

***Objective A1-5**: Low-Density Residential. The City shall designate land for Low-Density Residential.*

Policy A1-5.1: Purpose of Low-Density Residential Future Land Use Designation. This designation is intended to accommodate uses ranging from the large single-family lots found in the rural residential category to low density multifamily developments.

Policy A1-5.2: General Uses. The Low Density Residential designation allows low density single family and multi-family units such as duplexes, triplexes, quadplexes, or townhomes and accessory dwelling units.

Policy A1-5.3: Location of Low-Density Residential Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the Low-Density Residential future land use designation:

- Low density residential uses should not be located abutting State Road 50 in the downtown CRA.
- Low density residential should be located in a manner that encourages a transition between rural residential lands to more urban land use classifications that allow uses such as offices, medium density residential and light retail uses.

Policy A1-5.4: Development within Low-Density Residential Future Land Use Designation. The following criteria shall be used for determining appropriate development within the Low-Density Residential future land use designation:

- The City shall establish standards in the Land Development Code to ensure that non-residential uses are not allowed to locate in the Low-Density Residential Land Use Designation, unless the residential uses are protected from encroachment and negative impacts.
- Conversions of low density residential dwelling units into commercial uses are not allowed unless the site has the appropriate zoning for the proposed use, and the following standards are applied to ensure the protection of established neighborhoods and the feasibility of the proposed conversion:
  - The roadways, utilities and access to the property must be adequate to support the proposed change.
  - Adequate private or public parking must be provided for the proposed use of the property, including the standards of the American Disabilities Act.
  - Appropriate buffering will be required adjacent to existing residences.
  - The scale and design of the structure and signage must be consistent with the character of the neighborhood.

- Any proposed low density development will be required to provide potable water and may be required to provide dry lines and connections to the City's sanitary sewer service.
- If package plants for either water or sewer are proposed, they will be constructed to City standards, deeded to the City for maintenance, and designed to be eventually looped into the City's public service network.
- Culs-de-sac are discouraged in the City because they interfere with connectivity and increase traffic congestion on collector roads.
- Grid street networks are highly encouraged to serve residential developments and provide connectivity throughout the City.
- Gated communities (residential or mixed use) are discouraged because of the limitations their design creates for road connectivity.
- Parks, public open spaces, community centers and/or other public realm gathering spaces are required to be strategically located in residential developments to encourage social activity and recreation for the citizens.
- Cohesive streetscape design, signage, landscape architecture and streetscape furniture are encouraged to create an identity for new neighborhoods in the City.

Policy A1-5.5: Density and Intensity. The residential density for land designated Low-Density Residential shall be a maximum of four dwelling units per one acre (4 du/1 ac). The maximum intensity of non-residential uses shall not exceed a floor area ratio of 0.4.

Objective A1-6*: Medium-Density Residential. The City shall designate land for Medium-Density Residential.*

Policy A1-6.1: Purpose of Medium-Density Residential Future Land Use Designation. This designation provides for a range of housing types in a medium density setting.

Policy A1-6.2: General Uses. Typical uses may include single family detached, zero lot line, duplexes, triplexes, quadplexes, garage apartments, villas, cluster housing, townhouses, mobile homes, modular/manufactured homes and small apartment complexes at medium densities. Accessory dwelling units are allowed in this designation as well.

Policy A1-6.3: Location of Medium-Density Residential Future Land Designation. The following criteria shall be used for determining appropriate locations for the Medium-Density Residential future land use designation:

- Medium density residential uses are primarily encouraged within the downtown area, as well as in mixed use planned communities.
- The medium density residential category serves as a transition between low density residential uses and retail/office/high density uses.

Policy A1-6.4: Development within Medium-Density Residential Future Land Use Designation. The following criteria shall be used for determining appropriate development within the Medium-Density Residential Future Land Use Designation:

- Appropriate performance standards shall be adopted for medium density residential zoning districts to reduce impacts on adjacent low density residential uses.
- Lower densities shall be located along the perimeter adjacent to lower density development.

- Direct access to collector or arterial roads shall be required for medium density residential developments, unless located within a mixed use planned unit development.
- Provision of central potable water service is required.
- Provision of wastewater service is required for all medium density residential developments that exceed 4 dwelling units an acre.

Policy A1-6.5: Density and Intensity: The residential density for land designated Medium-Density Residential shall be a maximum of eight dwelling units per one acre (8 du/1 ac). The maximum intensity of non-residential uses shall not exceed a floor area ratio of 0.4.

Objective A1-7: *High-Density Residential. The City shall designate land for High-Density Residential.*

Policy A1-7.1: Purpose of High-Density Residential Future Land Use Designation. This designation also provides for a wide range of housing types, but at higher densities than other residential categories.

Policy A1-7.2: General Uses. This designation allows for small multi-family complexes in addition to very dense single family dwelling subdivisions, such as zero lot line. Typical uses may include single family dwellings, duplexes, triplexes, quadplexes, villas, cluster housing, townhouses, mobile homes, manufactured homes and small apartment complexes.

Policy A1-7.3: Location of High-Density Residential Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the High-Density Residential future land use designation:

- High density is primarily encouraged within the downtown area, particularly along State Road 50 and County Road 33, as well as in mixed use planned communities.
- High density residential uses are to be used as transitional areas between medium density residential uses and retail, office and light industrial uses.
- Proximity of one mile to existing or designated commercial areas or employment centers shall be required for high density residential.

Policy A1-7.4: Development within High-Density Residential Future Land Use Designation. The following criteria shall be used for determining appropriate development within the High-Density Residential future land use designation:

- Lower densities shall be located along the perimeter adjacent to lower density development.
- Building heights must be stepped down if adjacent to sites with a lower intensity and density future land use designation.
- Direct access to collector or arterial roads shall be required for high density residential developments, unless located within a mixed use planned unit development.
- Provision of central potable water and wastewater is required for all high density residential development.

Policy A1-7.5: Density and Intensity: The residential density for land designated High-Density Residential shall be a maximum of twelve dwelling units per one acre (12 du/1 ac). The maximum intensity of non-residential uses shall not exceed a floor area ratio of 0.4.

***Objective A1-8**: Downtown Mixed-Use. The City shall designate land for Downtown Mixed-Use.*

Policy A1-8.1: Purpose of the Downtown Mixed-Use Future Land Use Designation. The Downtown Mixed-Use future land use designation is intended to accommodate a variety of uses in a compact mixed-use development setting appropriate for the downtown/CRA area. The intensity/density of the development and location of land uses within the downtown mixed use category will vary depending upon the compatibility of land uses, internally within the site and with surrounding uses.

Policy A1-8.2: General Uses. The Downtown Mixed-Use Future Land Use Designation permits low, medium and high density residential; commercial uses (retail and office); light industrial; educational facilities; recreation facilities and compatible public facilities.

Policy A1-8.3: Location of the Downtown Mixed-Use Future Land Use Designation. The Downtown Mixed-Use Land Use Designation will be allowed only in the downtown Community Redevelopment Area (CRA). Other future land use designations may be utilized within the CRA, as appropriate.

Policy A1-8.4: Development within the Downtown Mixed-Use Future Land Use Designation. The City shall adopt detailed standards in the land development code to direct the location of more intensive developments to activity center nodes, allowing a mix of uses and higher densities and intensities at those nodes. The areas between nodes may be developed with single uses at lower densities and intensities. The following general criteria shall be used for determining appropriate development within the Downtown Mixed-Use Future Land Use Designation:

- Activity center nodes shall be located along arterials and collectors, must be two (2) acres in size or greater. Residential uses within those nodes shall not occupy more than 75% of the total floor area of each development.
- The Downtown Mixed-Use Planned Unit Development (PUD-DM) zoning district is available, but not required, for development within the Downtown Mixed-Use land use designation.
- The Land Development Code shall maintain performance standards for the location and the types of uses that will be allowed in the Downtown Mixed-Use land use designation.
- The City shall encourage a compact and walkable living environment and workplace in the Downtown Mixed-Use land use designation.
- This designation shall allow an assortment of building types to be developed at a pedestrian scale for satisfying residential and non-residential needs.
- Low density residential uses will not be allowed adjacent to State Road 50.
- Private stormwater ponds shall be designed as amenities and to provide buffering when appropriate.
- New development shall use a grid pattern for efficient traffic circulation with at least two points of access and clustering homes away from natural resources.
- All large scale new developments over five (5) acres in size within the Downtown Mixed-Use will be required to provide unified architectural and streetscape themes.

- Redevelopment and new development shall be encouraged to create a balanced transportation system that accommodates pedestrians and bicyclists, as well as motorists.
- Strip commercial development shall be discouraged in the Downtown Mixed-Use.
- Mixed use buildings will be highly encouraged in this category.
- The City shall coordinate proposed future land use amendments and rezoning in the Downtown Mixed-Use with the Community Redevelopment Agency.

Policy A1-8.5: Density and Intensity. The residential density for land designated Downtown Mixed-Use shall be a maximum of twelve dwelling units per one acre (12 du/1 ac). Mixed-use developments at activity nodes shall have a *minimum* density of four dwelling units per acre (4 du/ac). The maximum intensity of non-residential uses shall not exceed a floor area ratio of 4.00 and an impervious surface area ratio of 0.90.

Objective A1-9: *Community Mixed-Use. The City shall designate land for Community Mixed-Use.*

Policy A1-9.1: Purpose of Community Mixed-Use Future Land Use Designation. The purpose of the Community Mixed-Use future land use designation is to establish mixed-use neighborhoods with a diversity of housing types within walking distance from a village center.

Policy A1-9.2: General Uses. The Community Mixed-Use future land use designation permits low, medium and high density residential; commercial uses (retail and office); limited light industrial; educational facilities; recreation facilities and compatible public facilities. The intensity/density of the development, location of land use, and allowed uses within the mixed-use category will vary depending upon compatibility of land uses, internally within the site and with surrounding uses.

Policy A1-9.3: Location of Community Mixed-Use Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the Community Mixed-Use future land use designation:

- Community mixed use lands shall be located adjacent to arterial or collector streets.
- Residential developments shall be required to provide at least two points of access and to provide shared access easements or roadways connecting to adjacent subdivisions.

Policy A1-9.4: Development within Community Mixed-Use Future Land Use Designation. The following criteria shall be used for determining appropriate development within the Community Mixed-Use future land use designation:

- The community mixed use land use is primarily intended to establish residential neighborhoods that have services within walking distance.
- A mixture of residential, retail, offices, civic and recreation shall be encouraged in the community mixed-use category.
- A diversity of housing types including single family detached, condos, duplexes, quadplexes, townhouses, and apartments may be encouraged if compatible with adjacent developments.
- The community mixed-use future land use category encourages the development of town or village centers that are sized to serve the needs of residents living within a one-quarter mile distance from the village center.

- The commercial (office and retail) component of a mixed-use community shall be limited to a maximum of twenty-five (25%) percent of the net area of the site.
- A maximum of 10,000 square feet of commercial and office use will be allowed unless a market study is prepared to demonstrate that the demand exists to accommodate additional non-residential use.
- No stand-alone commercial zoning shall be allowed along corridors and at intersections unless part of a town center or village center.
- The Community Mixed-Use Planned Unit Development District (PUD-CM) zoning district is the only district allowed for the development of mixed-use communities within the community mixed use land use category. Other zoning districts may be used for single use developments.
- The PUD rezoning application and Developers Agreement shall demonstrate the mitigation of impact on the City's ability to service the proposed development, and provide an explanation of how the proposed compact design will reduce demand on services.
- The intended character of a proposed mixed-use development shall be established at the time of rezoning to PUD. The Developer's Agreement shall specify the building styles or themes to be used throughout the development.
- The Developer's Agreement shall specify how the design of the less intensive uses will blend into the community with any more intensive uses proposed in the development program.
- Any amendment to the development program that adds a new type of development in an approved PUD will require an amendment to the Developer's Agreement to demonstrate how the character of the design of the new proposed use will integrate into the mixed-use community.
- Low density residential is appropriate in a community that provides a variety of mixed development such as residential, retail and office; as well as a variety of housing types including townhouses, condos and higher density apartments, as long as the design of the more urban uses is sensitive to the low-density character.
- Unified architectural and streetscape themes shall be required for all developments within the Community Mixed-Use category.

Policy A1-9.5: Density and Intensity. The residential density for land designated Community Mixed-Use shall be a maximum of eight dwelling units per one acre (8 du/1 ac). The *minimum* density for mixed-use developments shall be one dwelling unit per one acre (1 du/1 ac). The maximum intensity shall not exceed a floor area ratio of 0.35 (3.0 within a Village or Town center) and an impervious surface area ratio of 0.80. If a compact walkable community is proposed with mixed use buildings located in a central Town or Village center, then the floor area ratio for non-residential uses may be allowed to increase to a maximum of 3.0 within said Town or Village center.

Policy A1-9.6: Development greater than five acres in size may include a mix of residential and non-residential uses. Residential uses shall be a minimum of 75% (by land area), and a maximum of 100% (by land area). Non-residential uses shall be a minimum of 0% (by land area) and a maximum of 25% (by land area).

***Objective A1-10**: Rural Neighborhood Mixed-Use. The City shall designate land for Rural Neighborhood Mixed-Use.*

Policy A1-10.1: Purpose of Rural Neighborhood Mixed-Use Future Land Use Designation. The purpose of this land use is to encourage mixed-use developments that accommodate a greater amount of open space and are designed to allow residents to work and live in closer proximity. The variety of uses should be placed in such configuration as to encourage pedestrian accessibility. By accomplishing this, vehicle trips will be greatly reduced and greenhouse gas emissions will also be reduced.

Policy A1-10.2: General Uses. This category includes a mixture of commercial, residential, office and public/semi-public uses.

Policy A1-10.3: Location of Rural Neighborhood Mixed-Use Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the Rural Neighborhood Mixed-Use future land use designation:

- The City desires to reduce dependence on automobile travel and, therefore, vehicle miles traveled (VMT). Accordingly, the City of Mascotte shall be required to develop and implement a program designed to ensure that an adequate number of jobs per residential unit exists.
- The objective is to (1) reduce VMT and (2) establish and measure over time the jobs/housing balance so as to provide a framework for determining the number of jobs created and to measure the internal capture of trips and to ensure that, to the fullest extent possible, provides for alternative modes of transportation to and from work and recreation places.

Policy A1-10.4: Development within the Rural Neighborhood Mixed-Use Future Land Use Designation. The following criteria shall be used in determining appropriate development within the Rural Neighborhood Mixed-Use future land use designation:

- This category includes land used for a mixture of commercial, residential, office and public/semi-public uses. Included in this category are multi-use planned developments which support commercial, residential, office and public/semi-public uses.
- Residential development will include adequate onsite facilities for residents including open space, recreational amenities and parking facilities.
- Residential developments shall contain a diversity of attached and detached housing types and lot sizes.
- The commercial component is intended to provide for the day to day needs of the immediate neighborhood and shall be within walking distance from the neighborhood unless unusual site constraints prevail.
- Commercial uses to be distributed within the development are encouraged. A majority of commercial floor area will be highway or highway access. The balance of the commercial development will be internal to the project or as specified by the applicable overlay zone.
- Integration of commercial and office uses in the same building is encouraged. Some integration of residential uses with commercial and office in the same building is required if located within an overlay zone.
- Any proposed development utilizing the Rural Neighborhood Mixed Use designation must be designed with attention paid to the creation of a recreational trails system and transit

orientation. All efforts must be made to connect to any adjacent trails and accommodate any transit system.

Policy A1-10.5: The density and intensity of development within Rural Neighborhood Mixed-Use Future Land Use Designation shall be as follows:

- Development must include a minimum of 25% (by land area) open space. All undeveloped uplands, all recreation facilities, pedestrian plazas, dry retention ponds that are designed as amenities, and the land above the design water elevation on wet retention ponds count toward open space within Rural Neighborhood Mixed-Use.
- Residential density shall not exceed three dwelling units per net acre (3 du/1 ac), unless located within the Overlay Zones. Net acreage will mean the total land area less wetlands and/or surface waters within Rural Neighborhood Mixed-Use.
- Non-residential intensity shall not exceed a floor area ratio of 0.05 and an impervious surface ratio of 0.30, unless located within the following Overlay Zones.
    - One-Quarter Mile Overlay Zone. If any part of the development is located within one-quarter mile of an employment center or the intersection of arterial and/or collector roads as indicated on the Future Land Use Map or Comprehensive Plan Transportation Element, intensity within the stated radius may be maximized up to a floor area ratio of 0.20. Residential density within the stated radius will be a maximum of seven dwelling units per acre (7 du/1 ac). Integration of residential and commercial uses is required. A minimum of 75% of residential densities created by the Overlay Zone will be attached or integrated within commercial and office uses.
    - One-Half Mile Overlay Zone. If any part of the development is located more than one-quarter mile, and less than or equal to one-half mile, from an employment center or the intersection of arterial and/or collector roads as indicated on the Future Land Use Map or Comprehensive Plan Transportation Element, intensity within the stated radius may be developed up to 50% of the maximum floor area ratio and impervious surface area ratio of the One-Quarter Mile Overlay Zone. Residential densities within the stated radius will be a maximum of five dwelling units per acre (5 du/1 ac). A minimum of 50% of residential units created by the Overlay Zone will be attached or integrated with commercial and office uses.
- Development quantities and intensities realized by application of Overlay Zone criteria shall be distributed throughout the development as follows:
    - A minimum of 75% of the commercial/office floor area shall be located adjacent to the highway or have direct highway access.
    - A minimum of 75% of attached residential units will be located within the One-Half Mile Overlay Zone.
    - The remaining 25% of the commercial/office floor area and 25% of the attached residential may be distributed through the remainder of the project using traditional planning principles.

Policy A1-10.6: Development shall include a minimum of three of the following four uses: residential, commercial sales/services, office, and public/semi-public. The maximum and minimum of each use (by land area) shall be as follows:

- Residential – Maximum 60%, Minimum 15%
- Commercial Sales/Services – Maximum 25%, Minimum 2%
- Office – Maximum 25%, Minimum 2%
- Public/Semi-Public – Maximum 25%, Minimum 2%

***Objective A1-11:** Commercial. The City shall designate land for Commercial.*

Policy A1-11.1: Description of Commercial Future Land Use Designation. The Commercial Future Land Use Designation permits a variety of retail and office uses such as, medical facilities, shopping centers, restaurants, automobile service facilities, and other similar uses. Commercial land uses can be either light or heavy, but zoning for heavy commercial, such as auto sales and repair, will be limited based upon location criteria.

Policy A1-11.2: Location of Commercial Future Land Use Designation. The following criteria shall be used for determining appropriate locations for the Commercial Future Land Use Designation:

- All new development within the Commercial Future Land Use Designation shall be served by central sewer and water. If central sewer is not available and the project demand does not exceed 6,000 gallons per day, other interim sewer may be allowed upon authorization by the City.
- The amount of Commercial allowed along corridors and at intersections shall be limited to prevent urban sprawl.
- Development occurring in this designation must have direct access to collector or arterial roads or to service roads that maintain direct access to these roads.

Policy A1-11.3: Development within Commercial Future Land Use Designation. The following criteria shall be used in determining appropriate development within the Commercial Future Land Use Designation:

- No residential uses, other than security or emergency sleep quarters shall be allowed in commercial designated areas.
- Commercial areas shall encourage employment centers for various uses.

Policy A1-11.4: The non-residential intensity for land designated Commercial shall not exceed a floor area ratio of 0.50 and an impervious surface area ratio of 0.90.

***Objective A1-12:** Industrial. The City shall designate land for Industrial.*

Policy A1-12.1: Description of Industrial Future Land Use Designation. The Industrial Future Land Use Designation includes both light and heavy industrial uses. Industrial uses are typically connected with manufacturing, assembly, processing or storage of products. Allowed industrial uses include warehousing, wholesaling, limited retail, heavy equipment repair, private utility facilities, limited assembly, processing, motor vehicle impoundment facilities, construction offices, adult entertainment, and storage areas. This designation is intended to provide land for those uses that may emit noise or air pollution, significant truck traffic and be otherwise incompatible with residential areas.

Policy A1-12.2: Location of Industrial Future Land Use Designation. The following criteria shall be used in determining the appropriate locations for the Industrial Future Land Use Designation:

- Industrial uses shall not be located adjacent to residential development without appropriate opaque permanent buffers. Only non-manufacturing uses shall be placed adjacent to residential development.

Policy A1-12.3: Development within Industrial Future Land Use Designation. The following criteria shall be used in determining appropriate development within the Industrial Future Land Use Designation:

- No residential uses, other than security or emergency sleep quarters, shall be allowed in industrial designated areas.
- The Land Development Code will contain performance standards for location criteria and intensity of light industrial versus heavy industrial uses.
- Adult entertainment establishments and sexually oriented businesses shall be strictly limited to lands designated "Industrial" on the Future Land Use Map. The City may adopt interlocal agreements with Lake County and other neighboring cities to jointly coordinate the location of adult entertainment establishments and sexually oriented businesses and prevent them from impacting residential neighborhoods.

Policy A1-12.4: The non-residential intensity for land designated Industrial shall not exceed a floor area ratio of 0.75 and an impervious surface area ratio of 0.90.

***Objective A1-13**: Public/Semi-Public. The City shall designate land for Public/Semi-Public uses.*

Policy A1-13.1: Description of Public/Semi-Public Future Land Use Designation. The Public/Semi-Public Future Land Use Designation consists of public facilities and private non-for-profit uses. This category allows public structures or lands that are owned, leased, or operated by a government entity, such as civic and community centers, hospitals, libraries, police and fire stations, and government administration buildings. The not-for-profit and semi-public uses include churches, social services, cemeteries, nursing homes, emergency shelters, utilities and other similar uses. Additionally, education facilities are included within this category, such as public or private schools (primary or secondary), vocational and technical schools, and colleges and universities.

Policy A1-13.2: Development within the Public/Semi-Public Future Land Use Designation. The following criteria shall be used in determining appropriate development within the Public/Semi-Public Future Land Use Category:

- Minor public utility facilities (telephone switching stations, lift stations, drainage infrastructure and ponds) shall be allowed in specified zoning districts including residential districts.
- Major public utility facilities (water and wastewater plants, landfills) shall require Public/Semi-Public land use categories.

Policy A1-13.3: The non-residential intensity for land designated Public/Semi-Public shall not exceed a floor area ratio of 0.45 and an impervious surface area ratio of 0.60.

***Objective A1-14**: Recreation and Open Space. The City shall designate land for Recreation and Open Space.*

Policy A1-14.1: Description of Recreation and Open Space Future Land Use Designation. This land use category includes park and recreation facilities owned by the City; the category may also include private parks and golf courses; as well as recreation facilities located at area schools that are under lease to the City. Open space includes those areas deemed worthy of preservation; such as attractive tree stands or pastures, public open space, common open spaces in private developments and significant right-of-way buffers along major roadways and drainage systems. Private recreation within subdivisions and common privately owned open space are not required to have this land use designation and may be located as accessory uses within residential categories. Similarly, private recreation uses that are open to the public for

a fee, such as bowling alleys, skate rinks, etc. may also be allowed in the commercial land use category and mixed use categories.

Policy A1-14.2: Development within Recreation and Open Space Future Land Use Designation. The following criteria shall be used in determining appropriate development within the Recreation and Open Space Future Land Use Designation:

- Public or private lands may be designated as recreation and open space.
- If development of recreation facilities occurs in this land use category, it should be for a public benefit.
- Private parkland does not have to be designated as Recreation and Open Space on the Future Land Use Map.
- If the facility is resourced based, the maximum amount of the site should be retained for open space to enjoy the resource. Only those recreation facilities that will allow interaction and enjoyment of the resource should be encouraged, such as boardwalks and picnic tables.
- If the facility is not resourced-based, a maximum of 25% impervious area shall be allowed for parking and buildings in areas designated as Recreation and Open Space land use to ensure the maximum protection of the open space, proper development and future public use and benefit.
- Greenways should be designated Recreation and Open space land use category and shall be encouraged to connect to the City's existing and proposed open space, conservation areas and parks.

Policy A1-14.3: The non-residential intensity for land designated Recreation and Open Space shall not exceed a floor area ratio of 0.25 and an impervious surface area ratio of 0.50.

***Objective A1-15:** Conservation. The City shall designate land for Conservation.*

Policy A1-15.1: Description of Conservation Future Land Use Designation. The Conservation Future Land Use Designation includes public lands that have been acquired and private land areas that have been reserved by mutual agreement with the property owner for the preservation and protection of the City's natural resources.

Policy A1-15.2: Location of Conservation Future Land Use Designation. The following criteria shall be used in determining the appropriate locations for the Conservation Future Land Use Designation:

- Any properties that contain very steep sloping topography subject to soil erosion, wildlife habitat areas, hydric solids/wetlands, special vegetative communities, floodplains, and other areas subject to environmental constraints are potentially suitable to be designated as Conservation.
- The actual boundaries for conservation lands should be delineated by a professional environmental analysis.
- Only passive recreation facilities shall be allowed in conservation areas.

Policy A1-15.3: No development, other than passive recreation, shall be allowed in the Conservation Future Land Use Designation. If the passive recreation includes a caretaker residence, the residential density shall not exceed one dwelling unit per twenty-five acres (1 du/25 ac).

***Objective A1-16**: Green Swamp Area of Critical State Concern. Lands within the Green Swamp Area of Critical State Concern shall be designated as such, with regulating polices that are specific for the Green Swamp as specified in Goal A4.*

***Objective A1-17**: Site-Specific Approved Density or Intensity. The City of Mascotte has determined that specific sites shall have a maximum number of dwelling units and/or impervious surface area.*

Policy A1-17.1: For the parcels listed below (and as designated on the Future Land Use Map), the City shall ensure that the density and intensity of developments allowed within those designations will not exceed the projected residential and commercial needs shown in the table below.

Parcel	Original Developer Parcel ID	Approx. Area (acres)	Future Land Use Designation	Maximum Dwelling Units	Maximum Commercial and Office Floor Space (sf)
A	Whidden/Langley 312125030510700000 012224000200000200 012224000200000400 012224010603300000 012224010603300001 022224000100000100 362124000300001700 352124000100000500 012224000300001300 352124000400001900 012224010603600001 262124000400000600	841.14	Community Mixed Use	2500	200,000
B	Ellis 352124000400001800	38.73	Community Mixed Use	150	0
C	BL Land Investments 332124000400000103 342124000300000602 342124000300000900 032224000200000600 032224000100002200	186.49	Low Density Residential	540	0
D	Weber/Flagship 042224000100001500 032224000200000800 012224020101200001	244.96	Community Mixed Use	999	0
E	Providence/Fakih 012224020103700000 012224020103900000 012224020105300000	114.84	Community Mixed Use	350	100,000
F	Banyan Construction 112224020000900000 112224000400002000 112224000100000400	112	Low Density Residential	228	0

Goal A2: Quality of Life. To effectively manage the land use pattern in the City to enhance the quality of life for its citizens; promote economic vitality; protect historic and natural resources; and, accommodate population and development growth in an environmentally acceptable manner through the year 2035.

Objective A2-1: *Open Space. Open space shall be provided for the enjoyment of all citizens.*

Policy A2-1.1: All residential, commercial, industrial and mixed use land use categories will be required to provide a minimum of 25% of the gross land area as open space.

Policy A2-1.2: If a land use category other than Recreation and Open Space contains parkland for private or public use then the subject parkland may contribute toward the required open space for the development.

Policy A2-1.3: The combination of development within the downtown Community Redevelopment Area shall be required to provide 25% open space overall, and a tracking system will be established by the City.

Policy A2-1.4: Recreation and open space within the downtown Community Redevelopment Area may be allowed to increase the impervious surface and reduce the open space requirements for plazas that are provided for recreation to the general public.

Policy A2-1.5: No more than twenty-five percent (25%) of the open space requirement can be fulfilled with wetlands and/or surface waters.

Policy A2-1.6: Developments of more than 25 dwelling units shall provide 250 square feet of outdoor recreational facilities per single family dwelling unit and 100 square feet per multifamily unit. Developments providing private recreational facilities (not open to the public) shall not be exempt from paying recreation impact fees, which are used to fund public recreation facilities.

Policy A2-1.7: Lakefront developments are encouraged to maintain the majority of the land around the lake as park land or common open space and to provide lake access, so that the lake is enjoyed by all the residents of the development.

Objective A2-2: *Development Buffers. Residential areas shall be buffered from adjacent roadways and intensive agricultural, commercial, and industrial land uses.*

Policy A2-2.1: The City shall encourage transitional uses between future land use categories that have different intensities/densities that may potentially have a negative impact on each other.

Policy A2-2.2: Buffering with berms, trees, wrought iron fences, brick walls, and other methods shall be included in the City's Land Development Code to protect various types of development from the impact of others.

Policy A2-2.3: The City shall maintain a landscape ordinance that requires adequate visual screening between incompatible uses.

Policy A2-2.4: The City shall maintain site design requirements and subdivision regulations in the Land Development Code which adequately address the impacts of new development on adjacent properties in all land use categories and zoning districts.

Policy A2-2.5: The City's Land Development Code shall limit signage and the glare from lighting which can be viewed from residential property and restrict the location of signs which interfere with traffic flow and sight distance.

Objective A2-3*: Wetland Buffers and Setbacks. Wetlands and/or surface waters shall be buffered from development. Buffers and Setbacks within the Green Swamp Area of Critical Concern may be greater than those specified within this Objective.*

Policy A2-3.1: The City shall require and enforce an undisturbed buffer, twenty-five (25) feet in width, adjacent to all wetlands and lakes. The area of wetlands in question shall include all contiguous wetlands located on the site and adjacent to the site. Buffers without native vegetation shall be revegetated with indigenous habitat to protect the quality of the adjacent isolated wetland, wetland system, lake, river or stream.

Policy A2-3.2: On-site wastewater disposal systems (septic tanks or septic drain fields) shall not be allowed within seventy-five (75) feet of a wetland and/or surface water.

Objective A2-4*: Transportation/Land Use Compatibility. The City will ensure that population densities, housing types, employment patterns, and land uses are consistent with the City's transportation network.*

Policy A2-4.1: Curb-cuts and points of access to the traffic circulation system shall be minimized.

Policy A2-4.2: Shared driveways and cross access between adjacent properties shall be encouraged.

Policy A2-4.3: Proposed transportation improvements shall be consistent with the land use patterns on the Future Land Use Map.

Policy A2-4.4: Land uses that generate high traffic counts shall be encouraged to locate adjacent to arterial roads.

Policy A2-4.5: The City shall require an adequate quantity of on-site parking to accommodate land uses and develop criteria for allowing off-site parking.

Policy A2-4.6: The City shall require new developments to provide safe and convenient on-site traffic flow.

Objective A2-5*: Historic and Archeological Sites. The City shall identify historic properties and structures within the City and to provide for protection of archaeological sites.*

Policy A2-5.1: The City will protect and preserve its historic sites and properties, buildings, artifacts, and objects of antiquity that have scientific or historic value, or are of interest to the public.

Policy A2-5.2: Development shall be prohibited which alters or damages any site or building determined to be historically significant that is designated on the register of historically significant property maintained by the State of Florida.

Policy A2-5.3: Where feasible, the City shall assure that there shall be no loss of historic resources on City-owned property.

***Objective A2-6**: Public Utilities. The City will maintain regulations and procedures which will require provision of land for utility facilities necessary to support development and will limit land development activities when such land for utility facilities is not available, as specified in the following policies:*

Policy A2-6.1: Proposed development shall be reviewed in relation to existing and projected utility systems and any land needs of these systems; such as, water and sewer plants; reservation of road rights-of-way; transmission corridors for electric and other utilities; easements for maintenance; and, other requirements.

Policy A2-6.2: No development orders shall be issued unless it can be demonstrated that the land required by utility systems serving the City will be preserved.

Policy A2-6.3: Distribution electric substations shall be permitted in all land use categories and zoning districts within an electric utility's service territory, except those designated as conservation, preservation, or historic preservation on the future land use map or zoning map. The City shall comply with state law regarding standards, procedures, and regulations for approving site applications for distribution electric substations.

Policy A2-6.4: Wireless Telecommunications Facilities. The City shall regulate the location and construction of wireless telecommunication facilities to protect existing and future development from potential adverse impacts resulting from these facilities. Siting criteria and design requirements shall be consistent with state and federal law.

***Objective A2-7**: Public Schools. The City shall implement standards for the siting of public schools to increase the quality of life and local educational opportunities for its citizens.*

Policy A2-7.1: Public schools shall be allowed in all future land use designations except conservation and industrial areas.

Policy A2-7.2: Public schools shall be listed in the Land Development Code as uses allowed in all zoning districts with the exception of the Conservation and Industrial zoning districts.

Policy A2-7.3: New school sites must not be adjacent to any noxious industrial uses or other property from which noise, vibration, odors, dust, toxic materials, traffic conditions or other disturbances that would have a negative impact.

Policy A2-7.4: New schools should minimize detrimental impacts on residential neighborhoods, hospitals, nursing homes and similar uses through proper site location, configuration, design layout, access, parking, traffic controls and buffers.

Policy A2-7.5: The size of new school facilities and land areas should satisfy the minimum standards established by the Lake County School Board, whenever possible.

Policy A2-7.6: Schools shall be located in close proximity to existing or anticipated concentrations of urban residential development.

Policy A2-7.7: New school sites should be well drained and education buildings should be located away from floodplains, wetlands, and other environmentally sensitive lands.

Policy A2-7.8: Education facilities should not have an adverse impact on historic or archaeological resources.

Policy A2-7.9: New school sites should have frontage on or direct access to a collector or arterial road and should have suitable ingress and egress for pedestrians, bicycles, cars, buses, service vehicles, and emergency vehicles.

Policy A2-7.10: To the extent possible, during pre-development program planning and school site selection activities, the City shall coordinate with the Lake County School Board to collocate public facilities, such as parks, libraries, and community centers, with schools.

Policy A2-7.11: Portions of new schools should be constructed to serve adequately as emergency shelters in case of natural disasters.

Policy A2-7.12: Schools will be developed consistent with the City's Comprehensive Plan and Land Development Code, as well as any mutual agreement between the City and the Lake County School Board.

Goal A3: Discourage Urban Sprawl and Encourage Redevelopment. The City will maintain regulations and procedures to limit the proliferation of urban sprawl and encourage redevelopment and revitalization of blighted areas through the year 2035.

***Objective A3-1**: Discourage Urban Sprawl. The City shall discourage urban sprawl by promoting development patterns that are planned and designed to do so.*

Policy A3-1.1: The City shall promote economic growth and associated land development to geographic areas of the community in a manner that does not have an adverse impact on and protects natural resources and ecosystems.

Policy A3-1.2: The City shall promote the efficient and cost-effective provision or extension of public infrastructure and services.

Policy A3-1.3: The City shall promote walkable and connected communities and provides for compact development and a mix of uses at densities and intensities that will support a range of housing choices and a multimodal transportation system, including pedestrian, bicycle, and transit, if available.

Policy A3-1.4: The City shall promote conservation of water and energy.

Policy A3-1.5: The City shall promote agricultural areas and activities, including silviculture, and dormant, unique, and prime farmlands and soils.

Policy A3-1.6: The City shall promote the preservation of open space and natural lands and provides for public open space and recreation needs.

Policy A3-1.7: All proposed development in the City shall demonstrate that such development will be adequately served by public facilities.

***Objective A3-2**: Encourage Redevelopment. The City shall encourage growth and redevelopment within the Community Redevelopment Area.*

Policy A3-2.1: The City will encourage development of a mixed use town center through infill and higher density and intensity development within the downtown Community Redevelopment Area.

Policy A3-2.2: The City will ensure the availability of services and facilities to accommodate development in the Downtown Mixed-Use land use designated areas.

Policy A3-2.3: The City shall pursue available federal, state, county and local funds for redevelopment for blighted or otherwise deteriorated areas as identified in the Mascotte Community Redevelopment Plan.

Goal A4: Green Swamp Area of Critical State Concern. The City of Mascotte shall protect the Green Swamp Area of Critical State Concern ("Green Swamp") as designated by the State of Florida. This protection shall include the creation of future land use designations that are specific to the Green Swamp and application of specific Policies regulating land use and development in the Green Swamp.

***Objective A4-1**: Development within the Green Swamp shall be conducted in a manner that minimizes impacts to the Floridan Aquifer system, wetlands, and flood plains.*

Policy A4-1.1: Development within the Green Swamp shall be regulated by specific policies (included in this Goal), the remaining Future Land Use Element, and the other Elements within the City of Mascotte Comprehensive Plan. Where there is a conflict in policy, standard, or regulation, the more stringent shall apply.

Policy A4-1.2: Any application for any development, other than an application for a building permit for a single-family dwelling unit, shall include a "Green Swamp Development Assessment". This assessment shall demonstrate how the proposed development is in compliance with this Goal and shall specifically address uses, open space, floodplain, wetlands, listed species, on-site sewage disposal, sediment and erosion control, stormwater management, and landscaping and irrigation. This assessment shall also demonstrate the manner in which the development application has considered the following:

- Minimize the adverse impacts of development on resources of the Floridan Aquifer, floodplain, and wetlands.
- Protect or improve the normal quantity, quality, and flow of ground water and surface water which are necessary for the protection of resources of state and regional concern.
- Protect or improve the water available for aquifer recharge.
- Protect or improve the functions of the Green Swamp Potentiometric High of the Floridan Aquifer.
- Protect or improve the normal supply of ground and surface water
- Prevent further salt-water intrusion into the Floridan Aquifer.
- Protect or improve existing ground and surface-water quality.
- Protect or improve the water-retention capabilities of wetlands.
- Protect or improve the biological-filtering capabilities of wetlands.
- Protect or improve the natural flow regime of drainage basins.
- Protect or improve the design capacity of flood-detention areas and the water-management objectives of these areas through the maintenance of hydrologic characteristics of drainage basins.

***Objective A4-2**: Future Land Use Designations. Within one year from the adoption of this Goal, the City of Mascotte shall enact regulations, including zoning districts that are consistent with the Future Land Use Designations described below and land development code regulations that are consistent with the Comprehensive Plan, all of which are specific to the Green Swamp.*

Policy A4-2.1: The following Future Land Use Designations shall be allowed within the Green Swamp. No other future land use designations shall be assigned to parcels wholly or partially within the Green Swamp.

- Green Swamp Conservation
- Green Swamp Rural
- Green Swamp Neighborhood
- Green Swamp Site Specific
    - Parcel Number 17-22-24-0001-0000-3400, Parcel Number 17-22-24-0001-0000-0300 and Parcel Number 17-22-24-0001-0000-0600 only, commonly known as "Boykin Parcels"

Policy A4-2.2: The maximum allowable density, maximum allowable intensity (floor area ratio), and the minimum required open space for each of the future land use designations is summarized as follows:

Future Land Use Designation	Max. Allowable Density	Max. Allowable Floor Area Ratio	Min. Required Open Space
Green Swamp Conservation	1 du/10 ac	N/A	80%
Green Swamp Rural	1 du/5 ac	N/A	60%
Green Swamp Neighborhood	2 du/1 ac	N/A	40%
Green Swamp Site Specific	See Policy A4-2.7		

Densities shall be measured over the net land area, excluding floodplain and wetlands. Transfer of residential density from floodplain and wetlands to uplands on the same site within the Green Swamp shall be allowed in accordance with Policies A4-3.6 and A4-3.7.

Policy A4-2.3: Any parcels annexed by the City of Mascotte that are located within the Green Swamp shall be designated as Green Swamp Conservation or Green Swamp Rural unless the applicant applies for a different Green Swamp designation and demonstrates that the parcel meets the requirements for the requested Green Swamp designation, as follows:

- Only parcels that are, at the time of annexation, designated by Lake County as "Green Swamp Rural" may be designated by the City of Mascotte as "Green Swamp Rural."
- The Green Swamp Neighborhood future land use designation may only be applied to parcels that are connected to municipal water and municipal sanitary sewer utilities.

Policy A4-2.4: The Green Swamp Conservation future land designation, with a maximum density of one dwelling unit per ten acres (1 du/10 ac) and a minimum of eighty percent (80%) open space, provides for limited rural uses:

- Agriculture and forestry
- Rural single-family residential
- Passive private or passive institutional parks and recreation lands
- Non-commercial equestrian-related uses

Policy A4-2.5: The Green Swamp Rural future land use designation, with a maximum density of one dwelling unit per five acres (1 du/5 ac) and a minimum of sixty percent (60%) open space, provides for limited rural uses:

- Agriculture and forestry
- Rural single-family residential
- Passive private and passive institutional parks and recreation lands

- Non-commercial equestrian-related uses

Policy A4-2.6: The Green Swamp Neighborhood future land use designation is only appropriate for parcels on the northernmost area of the Green Swamp where there are sufficient interconnected uplands for development and it is economically feasible to extend municipal water and municipal sanitary sewer utilities to said parcels. The maximum density shall be two dwelling units per acre (2 du/1 ac) and the minimum open space shall be forty percent (40%). All development within Green Swamp Neighborhood must be connected to municipal water and sanitary sewer utilities. On-site sewage disposal systems are prohibited. Uses within Green Swamp Neighborhood shall be limited to the following:

- Low-density single-family residential
- Passive parks and recreation (private use only; only as a component of a low-density single-family residential planned unit development)
- Equestrian-related uses (non-commercial; only as a component of a low-density single-family residential planned unit development)

The following criteria shall be used for determining the appropriate locations and shall be used in consideration of any development application for property designated as Green Swamp Neighborhood:

- Any parcel designated as Green Swamp Neighborhood that is to be developed shall have direct access to State Road 50, Bay Lake Road (County Road 565 South), or Mascotte Empire Road.
- No parcel that is located south of the centerline of Brantley Road and the southernmost (westerly) segment of Carter Jones Road, or the easterly or westerly extension of each thereof, shall be designated as Green Swamp Neighborhood.
- The Land Development Code may require that development of any parcel of property designated as Green Swamp Neighborhood that would include non-residential uses (parks or equestrian-related uses) must be approved by the City of Mascotte through the City's Planned Unit Development process.
- Perimeter buffering shall be required around any new development. Buffers must be a minimum of fifty feet (50 ft.) in depth along any dedicated road right-of-way and a minimum of one hundred feet (100 ft.) in depth along any parcels adjoining the development. Buffering may be included in the calculation of open space.

Policy A4-2.7: Green Swamp Site Specific. Parcel Number 17-22-24-0001-0000-3400, Parcel Number 17-22-24-0001-0000-0300 and Parcel Number 17-22-24-0001-0000-0600, as defined by the Lake County Property Appraiser (commonly known as "Boykin Parcels"), are designated as Green Swamp Site Specific, and the following site-specific policies shall apply:

- Development applications may be approved on the parcels if the parcels are not connected to municipal water and municipal sanitary sewer utilities.
- Any development shall include a minimum of forty percent (40%) open space as defined in this Goal.
    - Open space does not include parking or any other impervious surfaces.
    - No materials shall be stored in the open space.
    - The combined open space requirement for all three Boykin Parcels is 440,827 square feet. This open space may be provided in one area or may be distributed across the

Boykin Parcels. Buffer, as required in this Policy, may be included in the calculation of open space.

  - Prior to construction of additional buildings, a survey shall be prepared indicating the location and amount of open space.
  - The open space identified on the Boykin Parcels will be indicated by stakes or some other permanent identifying barrier to ensure that it remains undisturbed.

- The total gross floor area of all buildings and structures, including conditioned space, unconditioned space, canopies, and overhangs, shall not exceed 8,000 square feet combined on the Boykin Parcels until such time that the parcels are connected to municipal water and municipal sanitary sewer utilities.
- Perimeter buffering shall be required around any new development. Buffers must be a minimum of twenty-five feet (25 ft.) in depth along any dedicated road right-of-way and a minimum of fifty feet (50 ft.) in depth along any parcels adjoining the development. Appropriate buffers may include opaque fencing, walls, landscaping, or other appropriate buffer to reduce visibility, noise, and particulate matter. Buffering may be included in the calculation of open space.
- Wholesale and retail sales on the Boykin Parcels shall be limited to the following materials: clean soil; clean sand, gravel, and stone; limerock; and clean, processed debris such as wood, concrete, and asphalt millings. The natural materials listed above shall not be extracted from the Boykin Parcels.
- Asphalt millings shall be placed on an impervious surface and shall have secondary containment to ensure that stormwater run-off is retained within the impervious surface and is treated prior to any discharge.
- Office uses shall be allowed on the Boykin Parcels; however, office uses shall be limited to the property owner's primary business located on site.
- Storage, maintenance, and repair of vehicles shall be allowed on the Boykin Parcels; however, storage, maintenance, and repair shall be limited to vehicles and equipment used for the property owner's business located on site.
- Processing and storage of materials may be allowed on the Boykin Parcels; however, processing and storage of materials shall be limited to the materials that are for sale as part of the property owner's business located on site. Materials shall not be stored in open space.
- Refuse containers shall be limited to a maximum of fifty cubic yards (50 yds.). The existing aboveground diesel fuel storage tank shall be limited to a maximum capacity of five thousand gallons (5000 gal). No more than one aboveground storage tank shall be allowed. Underground storage tanks shall be prohibited.
- Any development application shall demonstrate that sufficient land area has been identified for existing on-site sewage disposal systems (septic systems) and the placement of any new on-site sewage disposal system (as required by the Lake County Department of Health). In addition, sufficient land area shall be reserved for the replacement of existing and required on-site sewage disposal systems.
- Property owners shall be required to connect to municipal water utility within 180 days of written notification from the City that water utilities are available, as defined by the City's Code.

- Property owners shall be required to connect to the municipal sanitary sewer utility within 180 days of written notification, and, pursuant to Fla. Stat. §381.00655, that sanitary sewer service is available as defined by the City's Codes.
- All other Objectives and Policies regulating land use and development within the Green Swamp not inconsistent with these site-specific policies shall apply to these parcels, including, but not limited to, prohibited uses, floodplain, wetlands, stormwater management, and inspection of on-site sewage disposal systems (septic systems).

***Objective A4-3**: Within one year from the adoption of this Goal, the City of Mascotte shall enact land development code regulations that impose specific restrictions on any construction activity, development, and land use within the Green Swamp Area of Critical State Concern and implement the following Policies.*

Policy A4-3.1: Development. Single-family residential lots shall be clustered in any development, with the remaining land to be used for open space. The clustering of single-family residential lots shall be located on the least-sensitive land areas of the entire development parcel.

Policy A4-3.2: Access. Any parcel approved for development by the City shall have frontage on a city-maintained, county-maintained, or state-maintained roadway. Building permits may be issued for parcels that do not have frontage on said roadways if the parcel was created prior to the adoption of the 1991 Lake County Comprehensive Plan.

Policy A4-3.3: Prohibited Uses. The following activities are specifically prohibited within the Green Swamp:

- Mining, borrow pits, or any other resource extraction (including sand mining, peat mining, limerock mining, and phosphate mining)
- Solid waste management facilities (landfills, transfer stations, drop-off facilities, or material recovery facilities)
- Wastewater treatment plants and wastewater spray fields (when wastewater has not been treated to advanced wastewater treatment standards)
- Spreading of sludges
- Golf courses
- Dry cleaning plants
- Petroleum pipelines, petroleum-related industries, and fuel wholesalers
- Chemical manufacturers and distributers
- Fertilizer manufacturers and distributers
- Underground storage tanks

Policy A4-3.4: NPDES Permits. With the exception of general construction activities, facilities engaged in industrial activities that require a National Pollution Discharge and Elimination System (NPDES) Permit for Stormwater Associated with Industrial Activities (Chapter 40, CFR Part 122) shall not be permitted within the Green Swamp.

Policy A4-3.5: Open Space. Development within the Green Swamp shall include open space as required by the Future Land Use Designation. Open space within the Green Swamp is defined as a portion of the gross land area that remains unencumbered by any building, canopy, roadway, pavement, or other impervious surfaces and remains open from the ground to the sky.

Floodplain and wetlands may be included in the calculation of open space. Surface waters shall not be included in the calculation of open space. Stormwater management ponds, other stormwater management improvements, and on-site sewage disposal systems may be located within the designated open space.

Policy A4-3.6: Floodplain. Development within the one-hundred year floodplain (or known as "flood hazard area"; defined as that area that lies within Zone A or Zone AE as delineated by the FEMA Flood Insurance Rate Map) shall be limited as follows:

- For parcels that include land both outside the floodplain and within the floodplain, no development shall be allowed within the floodplain.
- Residential densities may be transferred from the land area within the floodplain to the land area outside the floodplain at a rate of one dwelling unit per ten acres (1 du/10 ac). There shall be no transfer of non-residential intensity.
- For parcels that are entirely within the floodplain and that were created prior to the adoption of the 1991 Lake County Comprehensive Plan, the maximum residential density shall be one dwelling unit per ten acres (1 du/10 ac). Non-residential development shall be prohibited on parcels that are entirely within the floodplain.
- For any proposed subdivision or development that includes more than five acres (5 ac) within the floodplain, a flood study shall be performed in accordance with FEMA Guidelines and Specifications for Flood Hazard Mapping Partners. The construction of a single-family residence shall be exempt from this requirement. A single-family residential subdivision that is less than ten lots shall also be exempt from this requirement.

Policy A4-3.7: Wetlands. Development within, adjacent to, or near wetlands shall be limited as follows:

- No new development shall be located within fifty feet (50 ft.) of the furthest upland extent of any wetlands or water body.
- No development shall be allowed within wetlands.
- Wetland impacts shall only be allowed when providing access to a parcel will result in unavoidable wetlands impacts and the denial of said impacts would result in a taking. Impacts shall be properly mitigated through the appropriate agency with jurisdiction.
- Residential densities may be transferred from the land area within wetlands to the land area outside wetlands at a rate of one dwelling unit per twenty acres (1 du/20 ac). There shall be no transfer of non-residential intensity. Land area within wetlands shall not be included in the calculation of floor area ratio.
- For parcels that are entirely within wetlands and that were created prior to the 1991 Lake County Comprehensive Plan, the maximum residential density shall be one dwelling unit per twenty acres (1 du/20 ac), and only one dwelling unit shall be allowed on any parcel. Non-residential development shall be prohibited on parcels that are entirely within wetlands.
- Wetlands and upland buffers shall be maintained in their natural and unaltered state. However, controlled burns, selective thinning, and ecosystem restoration and maintenance are permissible activities within the wetlands and upland buffers, provided they are performed in accordance with current Silvicultural Best Management Practices published by the Division of Forestry. Any isolated wetlands of less than one acre shall be exempt from these requirements.

Policy A4-3.8: Protection of Listed Species. Any new development application within the Green Swamp shall include a field study for listed species (flora or fauna identified as endangered, threatened, or special concern by the US Fish and Wildlife Service and/or the Florida Fish and Wildlife Commission). If it is determined that listed species are located on the parcel, a habitat management plan shall be prepared and implemented as part of the development. Said management habitat plan shall be reviewed and approved by the US Fish and Wildlife Service and/or the Florida Fish and Wildlife Commission.

Policy A4-3.9: Containment. Any land use within the Green Swamp that proposes to store and/or sell materials such as sand, peat, soil, and/or rock, or similar new or recycled materials, must provide adequate containment and storage. Land uses that propose to store products such as petroleum-based materials, metals or metallic materials, asphalt, paints, or other similar materials, must provide an impervious base for the materials and curbing as required so that there is no discharge of run-off or contact water from the materials. Vehicle or equipment repair areas must provide an enclosed space or an impervious base with secondary containment as required so that there is no discharge of any liquids to groundwater.

Policy A4-3.10: On-Site Sewage Disposal System (Septic Systems). The City shall adopt an onsite sewage treatment and disposal system evaluation and assessment program for onsite sewage disposal systems which exist or that are constructed within the Green Swamp that meets the following regulations, to the extent such regulations do not deviate from the requirements of § 381.00651(3) and (6):

- No new on-site sewage disposal system (septic system), or any component thereof, including, but not limited to, septic tanks, dosing tanks, and drainfields, shall be located within one hundred feet (100 ft.) of the furthest upland extent of any wetlands or water bodies.
- At least once every five (5) years, every parcel owner with one or more on-site sewage disposal system within the Green Swamp shall have all septic tanks cleaned and inspected in accordance with the requirements of the Lake County Department of Health. The City of Mascotte shall coordinate with the Department of Health to require that the septic tank be cleaned, that the mound, drainfield, septic tank, and other components of the on-site sewage disposal system shall be in good working order and in compliance with the standards of Chapter 64, FAC, and the standards described herein. As necessary, a fee to be paid by parcel owners shall be assessed to cover the costs of administering this program. The parcel owner shall make all repairs that are necessary to bring the septic tank system in compliance with all the requirements herein.

Policy A4-3.11: Sediment and Erosion Control. General construction activities are permitted within the Green Swamp. All development permits shall be conditioned upon an applicant obtaining all necessary state and federal permits before commencement of development.

Policy A4-3.12: Stormwater Management. Within the Green Swamp, stormwater management systems shall meet the following requirements:

- Stormwater quality best management practices shall be required to treat the greater runoff volume from either the first one inch (1 in.) of rainfall over the entire parcel (less floodplain and wetlands) or the first two and one-half inches (2-1/2 in.) of rainfall over the impervious surfaces.
- Stormwater management systems located within areas that have soils designated as Hydrologic Soil Group “A” (HSG A) must specifically retain and infiltrate the run-off from

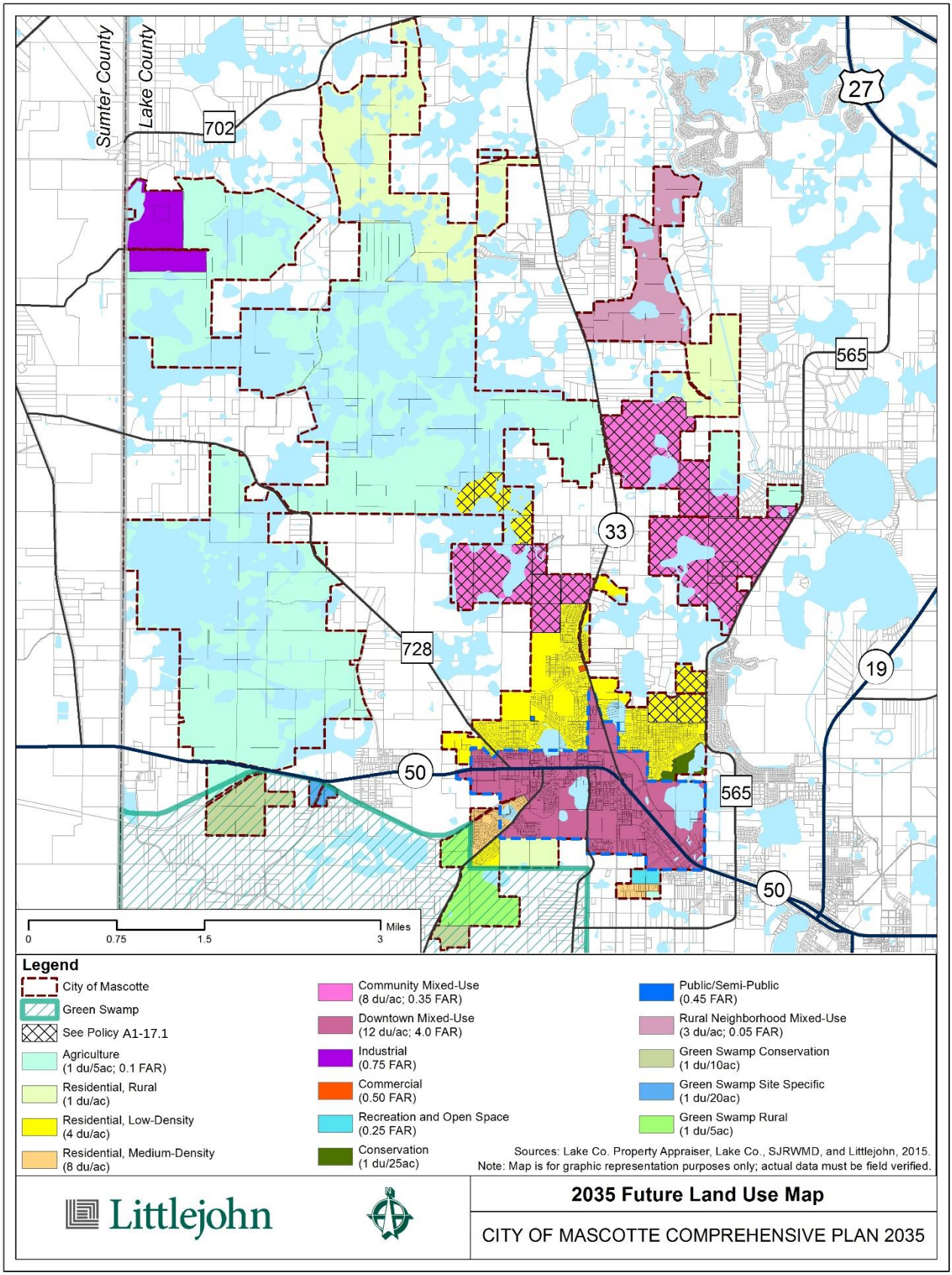
either the first three inches (3 in.) of rainfall or the mean-annual, 24-hour rainfall event, whichever is greater, over directly-connected impervious surfaces.

- Runoff volume discharged from impervious surfaces within non-residential developments must be treated through a filtering or cleansing device or other best management practice that specifically removes a minimum of sixty percent (60%) of oils and greases from the stormwater discharge.
- Residential developments shall designate a specific entity that is responsible for the maintenance and operation of the stormwater management system for the development.
- Each owner of a non-residential parcel shall be responsible for the maintenance and operation of the stormwater management system on that parcel.

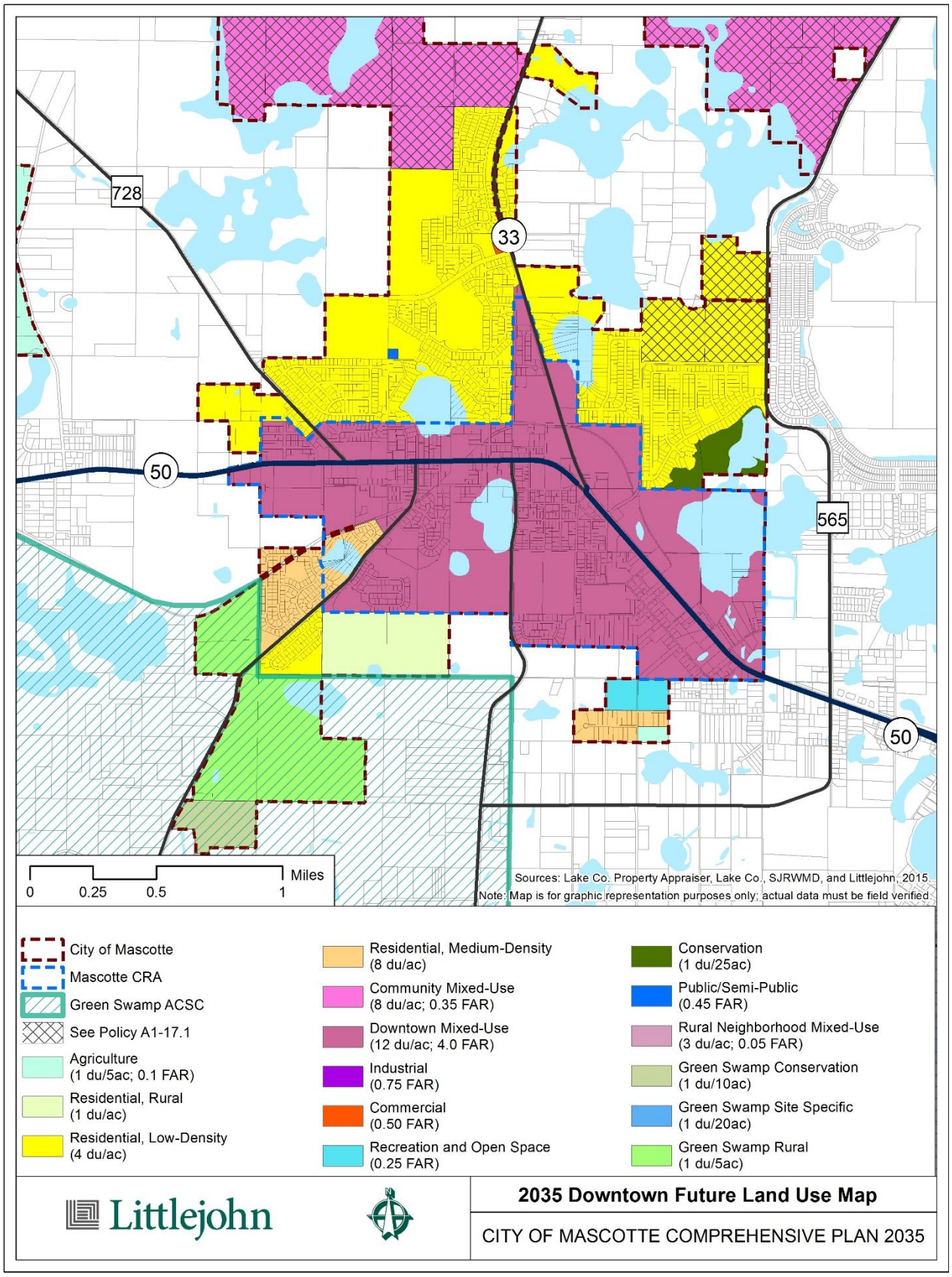
Policy A4-3.13: Irrigation and Landscaping. Within the Green Swamp, the irrigated area of any parcel shall be limited as follows:

- The irrigated area of any single-family lot shall not exceed ten thousand square feet (10,000 sf).
- The irrigated area of any non-residential developments shall not exceed the size of the building footprint of the primary building.
- Irrigation of agricultural uses shall be regulated by the appropriate water management district.
- For non-agricultural uses, fertilizer may be applied no more than four times per year and may not be applied during the months of June, July, August, and September.

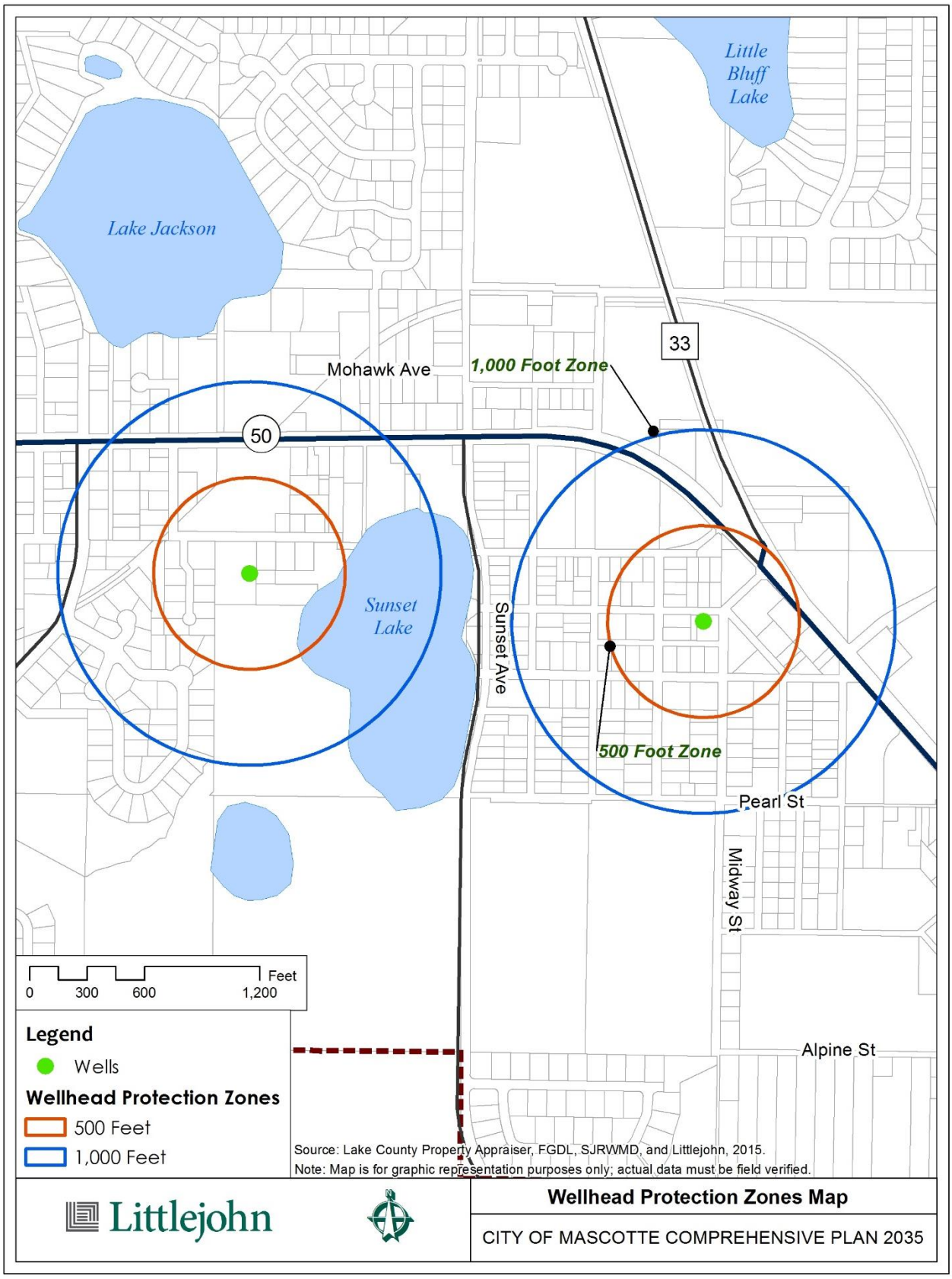
MAP A – 1: FUTURE LAND USE MAP



MAP A – 2: FUTURE LAND USE MAP – DOWNTOWN AREA



MAP A - 3: WELLHEAD PROTECTION ZONES



ELEMENT B - HOUSING

Goal B1: Provision of Housing. To ensure an adequate supply of a wide range of housing types, at various levels of affordability, to accommodate the needs of the residents of Mascotte through the year 2035.

***Objective B1-1**: Housing Supply. Assist the private sector to provide approximately 573 new dwelling units of various types, sizes, and costs by 2025, plus an additional 722 units between 2025 and 2035 necessary to house the City's anticipated population through the planning horizon. The City shall create an environment that allows the private sector to provide both the number of housing units and the type of housing units required for the expected growth of the City, including affordable housing, multi-family housing, and housing for seniors.*

Policy B1-1.1: The City's Future Land Use Map shall include adequate amounts of lands to accommodate the projected housing growth.

Policy B1-1.2: Ensure that necessary infrastructure capacity for the new dwelling units, population, and the secondary non-residential development expected from an increase in the housing stock and population.

Policy B1-1.3: The City shall regularly review ordinances, codes, regulations, and the permitting process to eliminate excessive requirements and to encourage private sector participation in meeting housing needs, including affordable housing needs.

Policy B1-1.4: The City shall, through the Land Development Code, encourage the development/redevelopment of housing that will integrate divergent choices of housing across all neighborhoods.

Policy B1-1.5: The City shall regularly review the regulatory and permitting process to determine whether there is a need to streamline the process.

Policy B1-1.6: The City shall continue to assist developers of residential dwelling units by providing technical and administrative support regarding permitting and regulations to maintain a housing production capacity level sufficient to meet the demand. Technical assistance includes, but is not limited to, assistance meeting the development review requirements of the City and other regulatory agencies; referral to appropriate agencies for information and assistance in meeting infrastructure standards and requirements imposed by the City; and provision of data regarding housing needs and conditions.

Policy B1-1.7: The City shall allow mobile home parks in certain residential zoning districts where adequate public facilities and services are available. Mobile home parks should be located adjacent to areas with a comparable density of development or near small-scale convenience or neighborhood commercial activity, in areas accessible to arterial and collector roads; and they should be located within reasonable proximity to community facilities.

Policy B1-1.8: The City shall allow manufactured homes in residentially zoned areas, provided that such housing is compatible with surrounding development and meets applicable building code regulations.

Policy B1-1.9: The City shall utilize Crime Prevention through Environmental Design (CPTED) principles in order to increase the safety of housing developments.

Policy B1-1.10: The City shall continue providing adequate supporting infrastructure, i.e. paved streets, drainage, potable water, and sanitary sewer when available, throughout the City to enhance and complement the housing stock.

Policy B1-1.11: The City shall cooperate with private and non-profit participants involved in the housing production and housing renovation.

Policy B1-1.12: The City shall maintain a database of building permit activity, and shall organize it efficiently to keep information on new housing units, conversions and demolitions by type, and tenure characteristics.

Objective B1-2*: Relocation. The City shall coordinate with the appropriate agencies to offer relocation assistance to city residents who are displaced by Federal, State, or local government programs and projects. The displacing agency shall be responsible for providing assistance, which includes, but is not limited to, financial means and methods.*

Policy B1-2.1: When residents are displaced by City actions, though public development or redevelopment, the City shall attempt to ensure the residents are able to relocate to standard, affordable housing.

Policy B1-2.2: The City shall require that zoning or structure use changes be evaluated as to their impact on citizens residing in the structure and the area.

Policy B1-2.3: The City shall coordinate with appropriate agencies to prepare plans of action regarding relocation of residents, before programs are enacted that will create displaced households. Such plans shall include, but are not limited to, the following:

- Timing of the relocation,
- Assessment of the need for the program which will displace households,
- Costs associated with the displacement of such households, and
- An assessment of the household's needs and the impact of the relocation on the household, including:
- Location and the effect of a new neighborhood location on the household's distance to job, schools, and social activities, and
- The adequacy of public transit, if applicable at the time, to serve the displaced household.

Objective B1-3*: Affordable Housing. The City shall encourage and assist the private sector in the provision of safe, clean, and affordable housing for special needs populations of the City, particularly the low and moderate-income households.*

Policy B1-3.1: The City shall review and revise its Land Development Code to remove constraints on the development of affordable housing projects, where such constraints are not supported by a valid concern for the health, safety, or welfare of the community.

Policy B1-3.2: The City shall provide technical assistance to non-profit agencies to plan and develop and renovate affordable housing. Technical assistance includes, but is not limited to, assistance with meeting the development review requirements of the City and of other regulatory bodies, referral to appropriate agencies (including City agencies and other agencies) for information and assistance in meeting infrastructure standards and requirements.

Policy B1-3.3: The City shall pursue public-private partnerships with non-profit agencies to assist very low and low-income families with the maintenance of and renovations to existing owner-occupied housing.

Policy B1-3.4: On a case-by-case basis, the City shall evaluate all infrastructure charges and fees to determine whether adjustments can be made for affordable housing projects or projects that include an affordable housing component. The City should also encourage the County to assist in this effort as the provision of housing needs benefits the larger area as well as the City itself.

Policy B1-3.5: Promote the refurbishment of existing housing structures by providing incentives and/or credits to homeowners for "sweat equity" rehabilitation within neighborhoods

in need, by defining the criteria for such incentives and/or credits in the City's Land Development Code.

Policy B1-3.6: Promote mixed uses, which include provisions for a wide variety of housing types and prices, in large developments (greater than 50 residential units).

Policy B1-3.7: Continue allowing a wide range of housing types, such as cluster homes, single-family attached, zero lot line homes, through the Land Development Code.

Policy B1-3.8: To support affordable housing, Community Redevelopment Area funds shall be made available for programs and incentives aimed at the creation and renovation of new affordable and multi-family units.

Policy B1-3.9: Efficiently plan and operate utility systems to provide for cost effective service operations.

***Objective B1-4**: Special Needs Households. The City shall ensure that adequate sites in residential areas are available for special needs populations, such as the elderly and disabled.*

Policy B1-4.1: The City shall include in the Land Development Code adequate standards for the location of community residential homes, including group homes, in residential areas in accordance with applicable Florida Statutes.

Policy B1-4.2: The City shall utilize the development review process to review any proposed projects or City Code amendments that impact housing for special need populations.

Policy B1-4.3: The City shall continue to support organizations that assist elderly and handicapped citizens in finding decent, accessible, and affordable housing. Such support may include technical assistance and alternative design standards and code requirements.

Policy B1-4.4: The City shall continue to ensure compliance with Federal and State laws on accessibility.

Policy B1-4.5: In an effort to address problems of housing for lower income elderly residents and other households with special housing needs, the City shall allow for the placement of retirement communities and elderly care facilities in areas of residential character as long as they are designed in a manner that is compatible with the character of the neighborhood.

Policy B1-4.6: The City shall adopt, as needed, Land Development Code revisions that allow the development of innovative retirement housing including adaptive construction techniques, "Granny Cottages", and accessory apartments.

Policy B1-4.7: The City shall support programs that address elderly housing policies through the area Council on Aging, and State and Federal efforts.

Policy B1-4.8: The City shall maintain a working relationship with the State of Florida Agency for Health Care Administration (AHCA), Lake County Health agencies, and organizations with an interest in the housing of disadvantaged populations, including consideration of subsidy programs offered by these agencies.

Goal B2: Preservation. Encourage the preservation of decent, safe and sanitary housing for the present and future residents of Mascotte.

***Objective B2-1**: Housing Units. The City shall continue to assist in extending the life of the existing housing stock, to stabilize neighborhoods and create community pride.*

Policy B2-1.1: The City shall encourage the renovation of substandard housing units.

Policy B2-1.2: The City shall consider applying for housing rehabilitation grant funds and subsidy programs such as:

- Community Development Block Grant (CDBG) funds administered by the U.S. Department of Housing and Urban Development, through Lake County.
- Florida Neighborhood Housing Services grant administered by the Florida Department of Community Affairs. (Chapter 420.429, F.S.).
- Florida Small Cities CDBG Program Funds administered by the Florida Department of Community Affairs. (Chapter 290.0401- 290.049. F.S.).

Policy B2-1.3: The City shall encourage low-income residents to apply for housing rehabilitation assistance individually or through the programs managed by the County.

Policy B2-1.4: The City shall continue implementing code enforcement activities to reduce the amount of substandard housing and preserve the available housing stock.

Policy B2-1.5: The City shall condemn and require demolition of those units which are determined by the Building Official to not be suitable for rehabilitation by public, private, or "sweat equity" means. This policy is to be initiated with caution and proper consideration when applied to units which are owner-occupied and when condemnation would cause undue hardship to the residents of the structure.

Objective B2-2*: Neighborhoods. The City shall promote housing opportunities for new households in already established neighborhoods and ensure the stabilization of all neighborhoods through the following policies, when applicable.*

Policy B2-2.1: Identify neighborhoods that are in need of rehabilitation or are experiencing instability based on any and all of, but not limited to, the following criteria:

- Proliferation of crime,
- A large percentage of substandard housing units,
- Fragmentation of land uses, and
- Poor or deteriorating infrastructure, including water, drainage, traffic and pedestrian systems.

Policy B2-2.2: The City shall consider neighborhood plans and programs, which strive to reduce or eliminate destabilizing neighborhood conditions, and include in such plans and programs activities which include, but are not limited to, greater levels of code enforcement, implementing neighborhood watch programs, "Safe Neighborhoods" programs, and Community Development Block Grant programs.

Policy B2-2.3: Provide for a high level of resident and owner participation in any plan or program implemented for the purpose of improving and/or stabilizing neighborhoods.

Policy B2-2.4: Investigate funding sources for these plans and programs, which may include but are not limited to, special taxing districts, "Safe Neighborhoods Act" funding, and Community Development Block Grant Funding.

Policy B2-2.5: Promote and support home ownership within older neighborhoods by providing incentives and/or credits to home owners for "sweat equity" rehabilitation within targeted neighborhoods.

Policy B2-2.6: The City shall continue enforcing the regulations prohibiting the expansion of non-compatible uses within residential neighborhoods.

Policy B2-2.7: The City shall require buffering and screening of residential neighborhoods from nearby incompatible uses by using landscape buffer yards or transitional uses.

***Objective B2-3**: Historic Preservation. The City shall preserve and protect historically significant structures and sites, in accordance with the provisions of this plan.*

Policy B2-3.1: The City shall pursue available grants and alternative funding to expand the local knowledge and awareness of existing historic and archaeological sites and structures.

Policy B2-3.2: The City shall annually request an updated list of historical site, properties, and buildings from the Division of Historical Resources, Master Site File.

Policy B2-3.3: The City shall consider the need to create a historic preservation ordinance and a local register of historic places.

Policy B2-3.4: The City shall continue to encourage property owners to rehabilitate and renovate their historically significant structures by supplying them with technical assistance and information regarding any available state and federal grants.

Policy B2-3.5: The City shall assist property owners of historically significant housing in submitting their properties for inclusion in local or National registers.

***Objective B2-4**: Infill. The City shall promote infill development by supporting alternative development standards where necessary and feasible.*

Policy B2-4.1: The City shall develop a vacant residential parcel map and database utilizing, if possible, the Lake County Property Appraiser's Office as a base. Such a system should include the size, location, physical characteristics, utilities, zoning, and ownership data.

Policy B2-4.2: The City shall make available the vacant land database and map to interested developers and/or builders.

ELEMENT C – CAPITAL IMPROVEMENTS

Goal C1: Provide attainable fiscal means to ensure the timely and necessary installation and maintenance of public facilities needed to meet the demands of residents and business establishments within the city limits of Mascotte through the year 2020.

Objective C1-1: *Capital Improvement Schedule. To ensure that the necessary facilities and infrastructure will be in place to meet Levels of Service established within the Comprehensive Plan, the City shall formally adopt the Capital Improvement Schedule as shown in the following table:*

Five-Year Capital Improvements Schedule

Items by Department	Funding Source	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Public Works						
Street Resurfacing Projects	Impact Fees	$50,000	$50,000			
Street Resurfacing Projects	Other			$50,000	$50,000	$50,000
Asphalt Rejuvenation Program	Impact Fees	$20,000	$20,000			
Asphalt Rejuvenation Program	Discretionary			$20,000	$20,000	$20,000
Sidewalk Program	Impact Fees	$5,000	$5,000	$5,000	$5,000	$5,000
Replace Trucks	Discretionary		$30,000	$30,000	$30,000	
Parks & Recreation						
Upgrade Playground: Civic Center	Discretionary	$30,000				
Upgrade Playground: Communicasa	Discretionary			$30,000		
Upgrage Playground: Mascotte Recreational Complex	Discretionary					$30,000
Water						
Reroof Knight St WTP	Current Revenues	$15,000				
Replace Generator: Knight St WTP	Discretionary		$215,000			
Lower Floridan Well	Other				$500,000	
Upper Floridan Aquifer Monitoring Well	Current Revenues					$9,100
Replace Trucks	Current Revenues	$30,000	$30,000	$30,000	$30,000	
Backhoe Replacement	Current Revenues			$60,000		
Sewer						
Portable Generator	Current Revenues		$30,000			
Leveraged Funds for CDBG	Discretionary	$41,000				
New Truck	Current Revenues		$30,000			
Stormwater Department						
Atlantic Avenue Flood Resolution	Current Revenues	$40,300				
Palmwood Avenue Erosion Issue	Current Revenues		$82,200			
MS4 Program	Current Revenues	$4,000	$2,600	$1,400	$1,400	

Policy C1-1.1: Capital projects shall be defined as those projects identified within the other elements of the Comprehensive Plan that are necessary to meet established levels of service, increase the capacity or efficiency of existing infrastructure, replace failing infrastructure or enhance facilities and infrastructure, and generally have a cost exceeding $10,000.

Policy C1-1.2: Components of Capital Improvement Schedule. Capital projects for the following facilities and infrastructure shall be included and funded as part of the City's Capital Improvement Schedule:

- Transportation
- Stormwater Management (Drainage)
- Sanitary Sewer
- Solid Waste
- Potable Water
- Parks and Recreation

Policy C1-1.3: Priorities in Allocating Capital Improvements. When allocating priorities for scheduling and funding capital improvement needs identified within the Comprehensive Plan, the City shall assign the highest priority to capital improvement projects listed in the Five-Year Schedule of Improvements for purposes of eliminating existing deficiencies.

Policy C1-1.4: Criteria. Capital projects shall be prioritized according to the following criteria (in no particular order):

- Whether the project is necessary to meet established levels of service.
- Whether the project increases the efficiency of existing facilities or infrastructure.
- Whether the project represents a logical extension of facilities within the utility service area.
- Whether the project is coordinated with major projects of other agencies.
- Whether the project implements the policies of the Comprehensive Plan as they pertain to concurrency requirements.
- Whether the project eliminates a public hazard.

Policy C1-1.5: The City shall adopt a capital improvements schedule every year as part of the annual budgeting process.

***Objective C1-2**: Coordination with Other Agencies. The City shall coordinate with other State and Local Agencies in the planning, funding, and construction of Capital Improvements.*

Policy C1-2.1: The City hereby adopts into the Capital Improvements Schedule, by reference, the Florida Department of Transportation "Five-Year Work Program", as amended, and the Lake-Sumter Metropolitan Planning Organization "Transportation Improvements Program (TIP)", as amended.

Policy C1-2.2: The City adopts into the Capital Improvements Schedule, by reference, the St. Johns River Water Management District "District Water Supply Plan", as amended, and the City of Mascotte "Ten-Year Water Supply Plan", as amended.

Policy C1-2.3: The City adopts into the Capital Improvements Schedule, by reference, the Lake County School District "District Facilities Work Program", as amended.

***Objective C1-3**: Level of Service (LOS). The City shall utilize level of service criteria defined in the various Elements of this Plan when determining the timing and funding of capital facilities.*

Policy C1-3.1: The minimum peak hour volume Level of Service (LOS) Standard for arterials and collectors roads shall be "C".

Policy C1-3.2: The level of service for residential Sewer is 80 gallons per day per capita or 240 gallons per day per Equivalent Residential Unit (ERU).

Policy C1-3.3: The level of service for non-residential Sewer is 0.10 gallons per day per square foot of floor area.

Policy C1-3.4: The level of service for Solid Waste is 6.00 pounds per day per capita.

Policy C1-3.5: The level of service for Potable Water is 106 gallons day per capita.

Policy C1-3.6: The level of service for total Park acreage is 4 acres per 1,000 residents.

Policy C1-3.7: The level of service (LOS) standards for the drainage system facilities developed within the City of Mascotte are noted in the following table:

• Flood Protection	25 year, 24 hour event
• Open Channels and culverts external to development	25 year
• Open Channels and culverts internal to development	10 year
• Cross Drains	25 year
• Storm Sewers	10 year
• Major Detention/ Retention Structures	25 year (SJRWMD)
• Minor Detention/ Retention Structures	25 year
• Retention w/ Percolation or Detention w/ filtration	25 year

Policy C1-3.8: Compatibility. In coordination with other City departments, the City Manager shall evaluate land use amendments to determine the compatibility of those amendments with the adopted level of service standards and to ensure adequate funding is available when improvements are necessary pursuant to such land use amendments.

Policy C1-3.9: Thresholds. Capital projects shall use the following thresholds to target initiation and budgeting of construction and/or purchase of capital facilities to meet projected future needs based on adopted level of service (LOS) standards:

- Roadways - Volumes are at 90% of adopted LOS capacity (as long as projects do not conflict with the Long Range Transportation Plan adopted by the Lake-Sumter Metropolitan Planning Organization).
- Sewer – 75% of available capacity is being utilized.
- Water – 75% of available capacity is being utilized.
- Recreation and Open Space – Park lands when 95 % of available land area is utilized or when 90% of the population exists in areas in need of new park acreage.

Policy C1-3.10: Funding Sources. The City shall pursue adequate funding sources for the construction of capital projects identified in the Capital Improvement Schedule.

Policy C1-3.11: Adequate Funding. The following procedures shall be utilized to ensure adequate funding for transportation capital projects:

- The City shall continue to participate in Lake-Sumter Metropolitan Planning Organization activities to advocate for the consideration of transportation improvements within the City to be included in the Long-Range Transportation Plan.
- 100% of State revenue sharing motor fuels tax funds shall be reserved specifically for traffic related maintenance and capital improvements.

- 100% of net proceeds, after payment of existing bond obligations, of the Lake County Local Option Gasoline Tax shall be reserved specifically for traffic related maintenance and capital improvements.
- 100% of the total proceeds from the Lake County Local Option Sales Tax shall be reserved for traffic related capital improvements.
- Funds collected from the Transportation Impact Fee shall be reserved for transportation capital projects.

Policy C1-3.12: Adequate Funding. The following procedures shall be utilized to pursue adequate funding for stormwater management (drainage) capital projects:

- 100% of the total proceeds from the Stormwater Utility Fund shall be reserved for stormwater management operating needs and capital projects.
- Cash restricted due to bond and grant covenants will be budgeted in accordance with the terms of the covenants.

Policy C1-3.13: Adequate Funding. The following procedures shall be utilized to pursue adequate funding for sanitary sewer capital projects:

- Maintain a reserve account restricted for sanitary sewer related capital projects.
- A portion of funds collected from the Utility Enterprise Fund shall be reserved to complete sanitary sewer capital projects.
- Cash restricted due to bond and grant covenants will be budgeted in accordance with the terms of the covenants.
- Wastewater impact fees.

Policy C1-3.14: Adequate Funding. The following procedures shall be utilized to pursue adequate funding for potable water capital projects:

- A portion of funds collected from the Infrastructure Surtax Fund shall be reserved to complete potable water capital projects.
- Cash restricted due to bond and grant covenants will be budgeted in accordance with the terms of the covenants.
- Water impact fees.

Policy C1-3.15: Adequate Funding. The following procedures shall be utilized to pursue adequate funding for parks and recreation capital projects:

- Grants shall be pursued and used for the completion of parks and recreation capital projects.
- The Code of Ordinances shall continue to contain provisions for all new developments to provide parks and recreation lands and/or facilities and/or fees-in-lieu-of improvements.
- Park impact fees.

***Objective C1-4**: Capital Improvement Evaluation. All City capital projects shall be evaluated to determine if they meet the prioritization criteria and consistency with adopted level of service standards and/or public need.*

Policy C1-4.1: Evaluation Criteria. Requests for capital projects shall be evaluated for their consistency with adopted level of service standards.

Policy C1-4.2: Inventory Hazards. The City shall continue to maintain an inventory of any existing hazards within the City by using the hazards analysis and hazards mitigation criteria established within the Lake County Comprehensive Emergency Management Plan and shall also identify any grant sources available to mitigate the hazards listed on the hazard inventory.

Policy C1-4.3: Capital Requests. Requests for capital projects shall be evaluated for their impact on the City budget.

Policy C1-4.4: Compatibility. All capital projects shall be reviewed as to their compatibility and timing in relation to capital projects being implemented or planned by Lake County, the Florida Department of Transportation, the St. Johns River Water Management District, the Lake County School District, the Lake-Sumter Metropolitan Planning Organization, the Florida Department of Environmental Protection, and/or any other government agency.

Policy C1-4.5: The City should use reasonable methods to track capital projects of any agency, which may be in conflict or may enhance the City's capital projects.

Policy C1-4.6: Debt Management. The City shall adopt procedures which address the management and utilization of debt for the purposes of capital project financing, and the City will use line of credit borrowing or bond anticipation notes for specific construction projects and issue revenue pledged debt at construction completion only if current funds do not provide adequate funding to pay for construction.

Objective C1-5*: Repair and Replacement. All City departments shall prioritize capital projects to provide for the repair and/or replacement of identified facilities.*

Policy C1-5.1: Department Priorities. As part of the annual budget process, all City departments shall identify and prioritize capital facilities in need of refurbishment or replacement and submit those facilities for funding in the Capital Improvement Schedule.

Objective C1-6*: New Development. The City shall ensure that new developments share a proportionate share of the costs required to maintain adopted level of service standards, through the assessment of impact fees or developer contributions, dedications, or construction of capital facilities necessary to serve new development as required in other Elements of this Plan.*

Policy C1-6.1: Evaluation of New Development Impacts. All development order applications shall be evaluated as to the impact of the development on capital facilities and the operation and maintenance of those facilities. The evaluation shall include, but not be limited to, the following:

- Expected capital costs, including the installation of new facilities required that are related to the development.
- Expected operation and maintenance costs associated with the new facilities required by the development.
- Anticipated revenues the development will contribute, including impact fees, user fees, and future taxes.

Policy C1-6.2: Developer's Agreements. When applicable, the City shall utilize developer's agreements to ensure the timely and appropriate installation of needed capital facilities to service new development. Such agreements will be executed under the City's constitutional home rule power and/or Chapter 163 Florida Statutes, following the procedures set forth in Florida Statutes.

Policy C1-6.3: Phased Development. To ensure adequate capacity allocations for all developments, the City may require any development to use developer's agreements and/or require development to be phased.

Policy C1-6.4: Proportionate Impact Fees. City shall continue to use impact fees for transportation, water, wastewater, parks, and police and fire to ensure new developments contribute their proportionate share of capital project funding necessary to service new development.

Policy C1-6.5: Developer Responsibilities. New developments shall be responsible for installing all internal water and sewer systems, traffic circulation systems, and internal

recreation/open space facilities within their development. In addition, connections of internal systems to the City's designated major water and sewer trunk systems and traffic circulation network shall be the financial responsibility of the developer.

Objective C1-7: *Concurrency. The City shall conduct a concurrency evaluation as part of the review of all proposed developments within the City of Mascotte for their impact upon the City's municipal services.*

Policy C1-7.1: The concurrency evaluation system shall measure the potential impact of any proposal for a development permit or order upon the established minimum acceptable levels of service for sanitary sewer, solid waste, drainage, potable water, parks and recreation, and transportation facilities, unless the development permit or order is exempt from the review requirements of this section. Transit and public transportation facilities are exempted from concurrency evaluation.

Policy C1-7.2: Concurrency evaluation shall be based on professionally-acceptable techniques, methodologies, and procedures.

Policy C1-7.3: No development permit or order which contains a specific plan of development, including densities and intensities of development, shall be issued unless adequate public facilities are available to serve the proposed development as determined by the concurrency evaluation.

Policy C1-7.4: Transportation improvements, as determined by the concurrency evaluation, required by proposed developments may be satisfied by the following methods:

- The developer in good faith offers to enter into a binding agreement to pay for or construct its proportionate share of required improvements in a manner consistent with Florida Statutes.
- The proportionate-share contribution or construction is sufficient to accomplish one or more mobility improvements that will benefit a regionally significant transportation facility.

The proportionate share process shall be implemented in the Land Development Code.

Policy C1-7.5: Land Acquisition. The City shall include any declared land acquisition, including land acquired for parks, recreation and open space, within the Capital Improvement Schedule.

Policy C1-7.6: Facilities Inventory and Reporting. The City Manager shall maintain an inventory of the available capacity within the roads, potable water, sanitary sewer, solid waste, and parks and recreation public facility categories

Policy C1-7.7: Each year, the City Manager shall prepare a report for the City Council containing the current capacity within each public facility category, including any encumbrances or deficiencies.

Policy C1-7.8: The annual report shall also identify any public facilities that will require improvements to maintain adopted levels of service and recommend a schedule of improvements to avoid any reduction in the approval of development orders.

Policy C1-7.9: Any identified transportation facility, including roadways, that requires improvements to maintain adopted levels of service shall be added to the Capital Improvement Schedule.

Policy C1-7.10: The City shall encourage development in areas that already include the necessary infrastructure, such as the following:

- Infill within the downtown core,
- Near existing, proposed, or potential transit and public transportation facilities, and

- In other areas where impacts would be de minimis.

ELEMENT D – TRANSPORTATION

Goal D1: Provide a safe, efficient and convenient transportation system for motorized and non-motorized users of the Mascotte transportation network through the year 2035.

Objective D1-1: *Level of Service. The City shall adopt and adhere to level of service standards for arterial and collector streets.*

Policy D1-1.1: The City shall use the most recent FDOT Generalized Peak Hour LOS criteria as general basis for the City's level of service standards.

Policy D1-1.2: The minimum peak hour volume Level of Service (LOS) Standard for arterials and collectors roads not on the State Highway System shall be "C". Roadways on the State Highway System shall follow the LOS standards set by FDOT.

Policy D1-1.3: A lower LOS may be acceptable immediately before or after special events where the impacts of such events on the roadway are infrequent.

Policy D1-1.4: The City anticipates that all roadways will meet the LOS standards through the year 2035. However, the City will continue to promote alternative transportation methods, particularly public transportation, in an effort to reduce vehicular travel on roadways.

Policy D1-1.5: As part of the Lake-Sumter Metropolitan Planning Organization Long Range Transportation Plan, the City shall support context sensitive improvements to State Road 50 (from County Road 33 west), County Road 565 North, and County Road 565 South.

Policy D1-1.6: The City shall independently monitor State Road 50 (from County Road 33 west to the city limits), County Road 33, and County Road 565 North to ensure no further Level of Service deterioration.

Policy D1-1.7: The City shall continue to implement the Midway Avenue relocation plan in cooperation with the Lake County School Board to provide better access to Mascotte Elementary Charter School.

Policy D1-1.8: The City shall continue to coordinate with the Lake-Sumter MPO regarding needed improvements to County Road 33, from State Road 50 to the Underpass Road.

Policy D1-1.9: The City shall continue to partner with local developers, Lake-Sumter Metropolitan Planning Organization, Lake County and other government agency to construct new corridors to relieve arterial and collector road congestion.

Objective D1-2: *Roadway Network. The City shall undertake measures designed to assist in the free flow of traffic along major roads and strive to maintain and improve the LOS on those roadways if at any time they operate at a lower LOS than the adopted standard.*

Policy D1-2.1: The City shall coordinate with Lake-Sumter Metropolitan Planning Organization on a traffic management system (signal synchronization) for all future signalization along State Road 50, from the west city limits to the east city limits.

Policy D1-2.2: The City shall coordinate with Lake County and the Florida Department of Transportation on all connections and access points of driveways and roads to county and state roadways, respectively.

Policy D1-2.3: The City shall maintain a record of traffic counts and traffic related accidents for all roadways in the City's network, and update those records on an annual basis.

Policy D1-2.4: The City shall continue to monitor all collector and arterial roadway access deficiencies, and shall devise methods to alleviate those deficiencies.

Policy D1-2.5: The City shall update their disaster preparedness plan by addressing evacuation procedures, the need for signage, and the availability and need of shelters.

Policy D1-2.6: The City shall coordinate with the development community to identify new east-west corridors to relieve congestion and provide improved connectivity within future development in the northern part of the city.

Objective D1-3*: Future Land Use, Housing and Population. The City shall coordinate the transportation system with the adopted Future Land Use Map series and shall ensure that existing and proposed population densities, housing and employment patterns, and land uses are consistent with the transportation modes and services proposed to serve these areas.*

Policy D1-3.1: The City shall review roadway improvements, new construction and roadway extensions proposed by other agencies for consistency with the Future Land Use Map series of the Comprehensive Plan.

Policy D1-3.2: Applications for future land use amendments to more intensive designations shall be accompanied by a traffic study analyzing the impacts of the development allowed by the new category on the citywide transportation system.

Policy D1-3.3: During the development review process, the City shall review all Future Land Use and zoning map amendments to determine the impact of the amendment on the LOS for all roadways directly and indirectly affected by the amendment.

Policy D1-3.4: The Transportation Element shall be reviewed and updated as needed with each annexation and amendment to the Future Land Use Element.

Objective D1-4*: Intergovernmental Coordination. The City transportation system shall be coordinated with the work plans and programs of Lake County, FDOT, the Florida Transportation Plan, the Florida Department of Environmental Protection, and the Lake-Sumter Metropolitan Planning Organization.*

Policy D1-4.1: The City shall coordinate its future transportation needs by attending, when necessary, public hearings on the FDOT's Five-Year Transportation Plan and the Lake-Sumter Metropolitan Planning Organization Long-Range Transportation Plan.

Policy D1-4.2: The City shall review subsequent versions of the FDOT Five-Year Transportation Plan and the Lake-Sumter Metropolitan Planning Organization Long-Range Transportation Plan, in order to update or modify this element, as necessary.

Policy D1-4.3: Utilization of County and State Numerical Indicators. The City shall use County and State numerical indicators for measuring the achievement of City mobility goals. Numerical Indicators shall include:

- Modal Splits;
- Annual Transit Trips Per Capita; and
- Automobile Occupancy Rates.

Objective D1-5*: Rights-of-Way. The City shall provide for the protection of existing and future right-of-way (ROW).*

Policy D1-5.1: The City shall develop a priority listing of needed ROW for the purpose of orderly and economical land acquisition.

Policy D1-5.2: The City shall compile and maintain a listing of existing and projected needs for ROW within the urban area.

Policy D1-5.3: The City shall require additional building setbacks for new construction on roadway corridors identified as needing additional ROW.

Policy D1-5.4: The City shall establish standards for donation/dedication of ROW by developers.

Policy D1-5.5: Corridors with inadequate ROW shall be inventoried and the City shall coordinate with Lake County for reservation of adequate ROW.

Policy D1-5.6: The City shall require that roadways be dedicated to the public when there is a compelling public interest for the roadways to connect with existing public roadways.

Policy D1-5.7: New subdivisions shall be required to "stub-out" to adjoining undeveloped lands to promote road connectivity, and to connect to existing roadways that are "stubbed-out" at their boundaries.

Policy D1-5.8: The City shall establish access management standards in the Land Development Code to ensure appropriate access to the City's transportation system. Standards may include the requirement of joint-use driveways and/or cross access easements to access sites.

Policy D1-5.9: The City shall preserve the movement function of the major thoroughfare system by requiring development of parallel roads or cross access easements to connect developments as they are permitted along major roads.

Policy D1-5.10: To the extent feasible, new roadways shall be aligned with the existing street network and be designed to follow the same urban fabric that exists within the City.

Objective D1-6*: Multi-modal System. The City shall promote alternative modes of transportation to provide a safe and efficient multi-modal system and to provide for a possible reduction of individual motor vehicle travel.*

Policy D1-6.1: In cooperation with the Lake-Sumter Metropolitan Planning Organization, the City shall pursue the development and construction of a transit hub near State Road 50 and County Road 33. The City shall coordinate with the Central Florida Regional Transit Authority (Lynx) to establish fixed bus route service to and from the City.

Policy D1-6.2: All new major roadways shall be designed as complete transportation corridors incorporating bicycle and pedestrian features, and planning for transit features to start creating a true multi-modal system.

Policy D1-6.3: The City should provide adequate ROW and construct bicycle ways along corridors to be specified in the bicycle plan.

Policy D1-6.4: Sidewalks shall be mandatory on all new roadway construction.

Policy D1-6.5: New residential developments with densities of one or more dwelling units per acre shall provide sidewalks on both sides of every street.

Policy D1-6.6: The City shall improve existing sidewalks and other pedestrian facilities. Priority will be given to those pedestrian facilities in the downtown core, high pedestrian activity areas, projected heavy recreational use areas, and along roadways between residential areas and schools.

Policy D1-6.7: The City will encourage wider sidewalks in high pedestrian/bicycle traffic areas.

Policy D1-6.8: Sidewalks shall be constructed, concurrently with new development by the developer.

Policy D1-6.9: Intersections shall be made pedestrian-friendly by limiting the crossing width; use of adequate lighting; adequate timing for traffic signals; and the provision of facilities for persons with disabilities.

Policy D1-6.10: The City shall require developers to construct internal trails for developments greater than 50 residential units. Said trail systems shall connect to the Lake County trail system and be consistent, when feasible, with the adopted Lake County Master Trail Plan.

Policy D1-6.11: The City shall develop citywide standards for maximum number of parking spaces to encourage walking, bicycling, ridesharing, and shared parking, and to keep the impervious surface area to a minimum.

Policy D1-6.12: The City shall require that new development be compatible and further the achievement of the Transportation Element. Requirements for compatibility may include, but are not limited to:

- Locating parking to the side or behind the development to provide pedestrian accessibility of building entrances and walkways to the street, rather than separating the building from the street by parking.
- Providing clearly delineated pedestrian routes through parking lots to safely accommodate pedestrian and bicycle circulation.

Policy D1-6.13: The City shall include landscaping and streetscaping as roadway design components in order to enhance the aesthetic and safety of the road for all users.

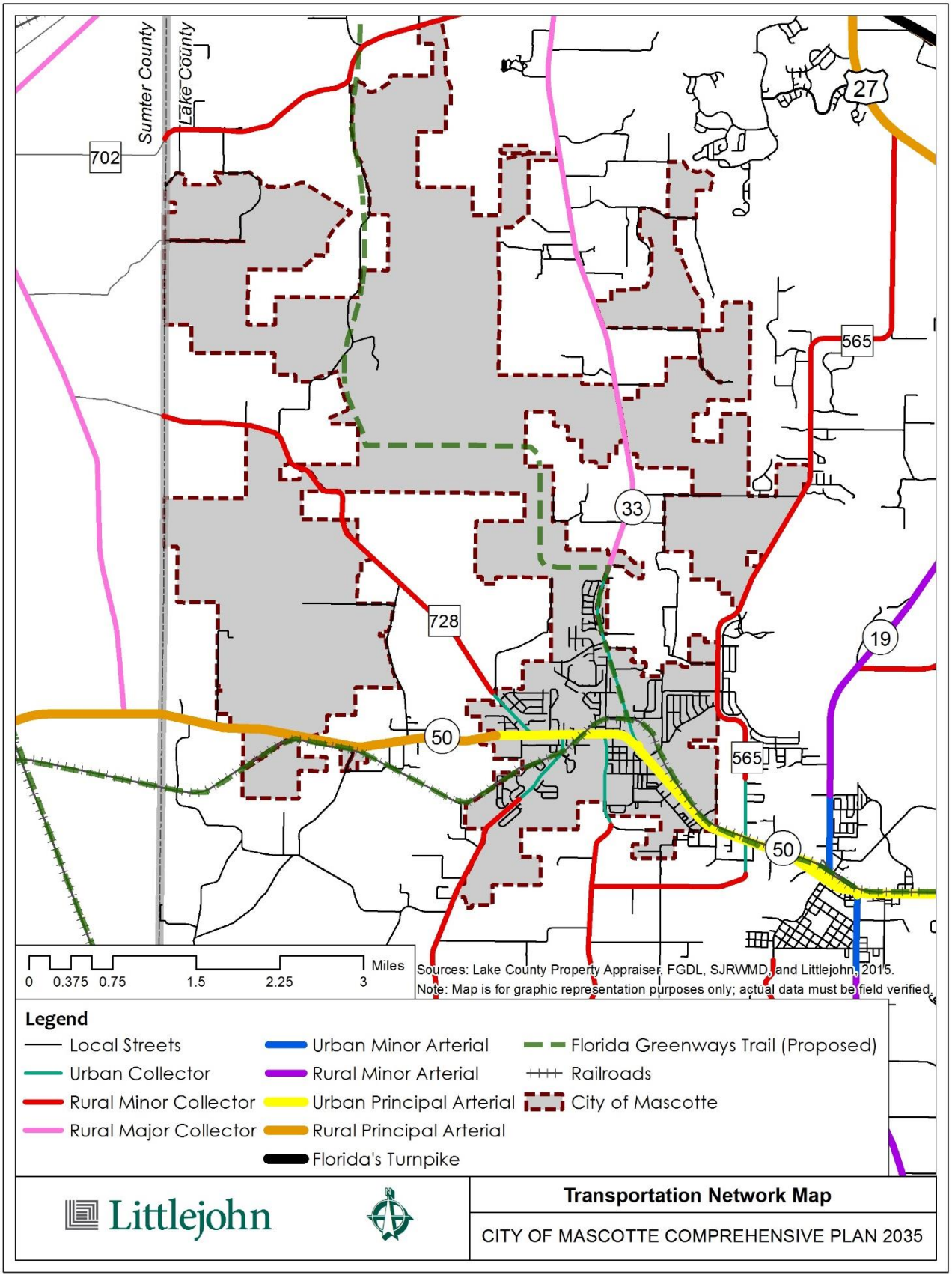
Policy D1-6.14: The City shall continue to pursue grant opportunities for median landscaping and road beautification.

Policy D1-6.15: Adequate pedestrian circulation and safety shall be considered as a required component of roadway system management, with implementation and required construction.

Policy D1-6.16: Way Finding. The City shall implement mechanisms to give direction and prevent confusion for all types of transportation system users.

Policy D1-6.17: Capital Improvements Schedule. The City shall implement a capital improvement plan, methods of funding, and fiscal controls for all major traffic and roadway projects.

MAP D – 1: FUTURE TRANSPORTATION NETWORK (2035)



ELEMENT E – PUBLIC FACILITIES

Goal E1: To plan for and assure an adequate supply of excellent quality potable water to meet the needs of all city residents and non-residential establishments within the City of Mascotte and within the City's service area through the year 2035.

***Objective E1-1**: Maintain Level of Service. Based upon adopted level of service standards, the City shall annually adopt programs and activities to correct existing deficiencies in the central potable water system.*

Policy E1-1.1: The City's Level of Service for potable water supply shall be 106 gallons per person per day.

Policy E1-1.2: When evaluating well capacity, the City shall use a peak factor of 200% of the average daily demand (ADD) in the calculation of the system's ability to meet the level of service standard.

Policy E1-1.3: When evaluating system high service pumping capacity, the City shall use a peak demand rate of 1.0 gpm per equivalent residential connection in the calculation of the system's ability to meet the level of service standard.

Policy E1-1.4: The City's central potable water system infrastructure shall be based on the following:

- Wellfield capacity shall be rated at the average daily demand and assuming the largest well being out of service, as well as rated at maximum day demand with all wells operational,
- Water storage capacity should be at least 25 percent of the maximum day demand volume,
- High service pump capacity shall at least be equal to the peak hour demand or the maximum day demand plus largest fire flow, whichever is greater, and assuming the largest high service pump being out of service, and
- The backbone distribution system shall be designed for a minimum of forty (40) pounds per square inch (psi) delivery pressure.

Policy E1-1.5: The City will maintain its potable water treatment facilities in optimum condition by the implementation of a preventive maintenance program.

Policy E1-1.6: The City shall maintain a Potable Water System Master Plan, which shall be updated every five (5) years.

Policy E1-1.7: The City shall review water fee methodology and user rates annually during the budget process to ensure adequate funding for treatment, storage and distribution facilities.

Policy E1-1.8: The City shall develop a system of review of individual customer water meters to ensure proper readings of those meters.

Policy E1-1.9: The City shall institute a replacement or "change out" schedule for water meters in the field to ensure replacement at least every fifteen (15) years.

Policy E1-1.10: All improvements and/or additions to potable water facilities to correct deficiencies shall be compatible and adequate to meet the adopted level of service standards. These improvements and/or additions to potable water facilities shall comply, at a minimum, with standards recognized and approved by the Florida Department of Environmental Protection.

Objective E1-2: *Future Needs. Based upon population projections, the City shall ensure the supply and treatment of safe potable water to meet the adopted level of service standards.*

Policy E1-2.1: Based upon the adopted level of service the City will plan for replacement, expansion and extension of potable water facilities to meet future demands concurrent with new development.

Policy E1-2.2: The City will plan for adequate future treatment facilities, which at a minimum will meet all Federal and State drinking water criteria.

Policy E1-2.3: The City shall implement the capital improvement schedule for potable water facilities adopted in the Capital Improvements Element and the annual Capital Improvements Plan.

Policy E1-2.4: The City shall continue to monitor groundwater supply conditions in conjunction with the St. Johns River Water Management District, and in the event that additional water supplies are considered for development, the current District Water Supply Plan will be considered.

Policy E1-2.5: The City shall encourage and require the interconnection and looping of existing and proposed segments of the potable water distribution system as needed.

Objective E1-3*: Service Area Development. The City shall adopt a service area boundary for potable water and shall discourage leapfrog development and urban sprawl.*

Policy E1-3.1: The City's potable water service area shall be defined by the corporate limits of the City and those other areas located outside the corporate limits, which are established by the City's Chapter 180 Boundary and the Interlocal Service Boundary Agreement.

Policy E1-3.2: Before providing potable water service to properties located in unincorporated Lake County, the City shall require that the property owners receiving service execute and record an annexation agreement approved by the City Commission.

Policy E1-3.3: The City may provide wholesale potable water service to other cities and Lake County by written agreement.

Policy E1-3.4: The City shall be the provider of potable water to residents and non-residential establishments within the City's service area.

Policy E1-3.5: The City shall continue to maximize the use of the existing potable water treatment facilities connected to the central water system.

Policy E1-3.6: The City shall discourage urban sprawl through the following activities:

- The City shall require any new development within the City limits, regardless of the number of units or size of proposed development, to connect to the City's central potable water system for water service; and,
- The City will coordinate with Lake County to encourage that all new development within 1,000 feet of the City limits to connect to the central potable water system.
- The City shall only provide service to those areas included in the City's delineated utility service area;
- When reviewing applications for development orders within the City limits, the City shall consider impact on the environment, including the ability to be served by the City's existing water facilities.

***Objective E1-4**: Water Conservation. The City shall maintain initiatives to conserve potable water resources, which ensure that existing level of service standards for potable water, do not fluctuate higher than twenty (20) gallons per person per day.*

Policy E1-4.1: Maintain an inverted water rate structure to ensure conservation of potable water and to provide an incentive for the use of treated wastewater for irrigation purposes should the City choose to implement a central sewer system.

Policy E1-4.2: Whenever possible and feasible, and in cooperation with the cities of Leesburg and Groveland through existing interlocal agreements, the City will establish and maintain a reclaimed wastewater effluent program whereby wastewater is treated to standards consistent with Florida Department of Environmental Protection (FDEP) requirements for "unrestricted public access" irrigation of private and public areas, so that potable water is not used for irrigation in areas where reclaimed water is available for such irrigation.

Policy E1-4.3: The City shall maintain specific requirements for the use of low consumption plumbing devices in the Code of Ordinances.

Policy E1-4.4: The City shall adhere to St. Johns River Water Management District emergency water shortage restrictions when mandated by the District.

Policy E1-4.5: The City shall require fifty (50) percent of the required landscaping area, as indicated in the Land Development Code, be drought tolerant plant materials.

Policy E1-4.6: The City shall maintain a leak detection program in order to discover and eliminate wasteful losses of potable water from the City's central water supply and distribution system.

Policy E1-4.7: The City shall explore all financially feasible alternative water supply options that can be implemented by the City.

Policy E1-4.8: The City shall use all available lower quality sources of water in place of higher quality sources for landscape irrigation when technically, economically, and environmentally feasible.

Policy E1-4.9: The City shall participate in water conservation public information programs and shall encourage the use of water conserving plumbing fixtures and drought-resistant native vegetation for landscaping.

Policy E1-4.10: The City shall encourage the use of low impact development (LID) principles to minimize impacts to the nature environment and facilitate water conservation.

Goal E2: Provide adequate delivery and distribution of potable water to meet fire protection demand within the City of Mascotte and the City's service area.

***Objective E2-1**: Fire Protection Capabilities. The City shall continue to monitor, evaluate, repair and replace the existing water delivery and distribution system to ensure the system can deliver needed gallon per minute flows to meet fire protection demands.*

Policy E2-1.1: The City shall maintain an active water system and fire hydrant mapping and numbering program.

Policy E2-1.2: The City shall establish and maintain a hydraulic model of the City's water distribution network such that the City's water distribution system can be routinely analyzed with respect to fire flow delivery capabilities.

Policy E2-1.3: The City shall extend water distribution mains to areas within the City's service area and provide adequate fire protection service to residents and non-residential

establishments located within the service area provided the residents/developers participate in the costs.

Policy E2-1.4: Fire flow levels of service shall be based upon delivery pressures of twenty (20) psi residual and minimum fire flows of 500 gpm for residential and 1,500 gpm for non-residential and multi-family developments.

Goal E3: Implement and promote stable working relationships with other governmental agencies to ensure protection of the quality and quantity of its water sources.

Objective E3-1: *Intergovernmental Coordination. The City shall coordinate with adjacent jurisdictions and applicable state and federal agencies to protect the quality and quantity of water sources.*

Policy E3-1.1: The City shall meet annually with adjacent governments, private utilities, and state and federal agencies to coordinate the provision of potable water series and service area boundaries.

Policy E3-1.2: The City shall coordinate with adjacent jurisdictions and applicable regional, state, and federal agencies to educate the community about conservation, suitable use, and protection of the quality and quantity of its water sources.

Policy E3-1.3: The City shall review and update the Water Supply Facilities Work Plan and supporting data and analysis within eighteen months of the update of the SJRWMD district water supply plan and will amend this element as necessary to incorporate any applicable policies.

Policy E3-1.4: The City shall issue no development orders or development permits with first consulting with the City of Mascotte's Public Services to determine whether adequate water supplies to serve the development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or equivalent. The City will also ensure that adequate water supplies and facilities are available and in place prior issuing a certificate of occupancy or its functional equivalent.

Policy E3-1.5: The City will participate in the development of updates to SJRWMD's water supply assessment and District Water Supply Plan and other water supply development-related initiatives facilitated by SJRWMD that affect the City.

Goal E4: To provide an effective system of wastewater collection, transmission, treatment, and disposal to meet the needs of all City residents and non-residential establishments within the City of Mascotte service area while protecting the environment and public health.

Objective E4-1: *Maintain Level of Service. Based upon adopted levels of service standards, the City shall annually adopt programs and activities to facilitate implementation of a wastewater utility to serve newer, higher density development as well as areas where septic systems are failing.*

Policy E4-1.1: Residential. The City's adopted level of service for sanitary sewer capacity shall be 80 gallons per capita per day or 240 gpd per ERU for residential development.

Policy E4-1.2: Non-residential. The City's adopted minimum level of service shall be 0.10 gallons per day per square foot of floor area for non-residential development.

Policy E4-1.3: When evaluating collection force main and lift station capacity, the City shall use a peak factor of 3.0 times the average daily flows (ADF).

Policy E4-1.4: All improvements and/or additions to sanitary sewer facilities shall be compatible and adequate to meet the adopted level of service standards.

Policy E4-1.5: All land use amendments shall require an analysis of the impact of such amendment on the adopted level of service standard and existing sanitary sewer facilities.

Policy E4-1.6: All expansions and other improvements of commercial and industrial uses that increase the demand on public infrastructure and require permitting shall comply with the adopted levels of services.

Policy E4-1.7: The City shall comply with bond covenants, if any, to ensure the maintenance and operations of facilities, and to provide recommendations for system maintenance and improvements.

Policy E4-1.8: The City shall encourage continuing education of operating staff to ensure proficiency with respect to optimization of sanitary sewer maintenance and operation processes.

Policy E4-1.9: Sanitary sewer facilities shall be replaced and existing deficiencies shall be corrected based upon the following priorities:

- Any project correcting an immediate threat to the health, safety, or welfare of the City's residents will receive priority over the expansion of a facility or the correction or replacement of a non-threatening facility.
- Any project that will correct an existing deficiency will receive priority over a project to expand the system.
- Projects that will result in the system exceeding the adopted level of service will be denied.

***Objective E4-2**: Sanitary Sewer System. The City shall ensure that, when available, the City's sanitary sewer collection, conveyance, treatment, and disposal system is adequate to service the future land uses within the City's service area.*

Policy E4-2.1: The City shall, if available, provide sanitary sewer collection and conveyance services within the service area adopted as part of the Chapter 180 Service Boundary and the Interlocal Service Boundary Agreement. Wastewater treatment and disposal service shall be provided by the City of Leesburg and the City of Groveland through existing interlocal agreements. For purposes of this Comprehensive Plan, reference to "the City's sanitary sewer system," "central sewer system," and other similar terms means, collectively, wastewater treatment and disposal services provided to the City by the cities of Leesburg or Groveland and wastewater collection and conveyance services of the City of Mascotte.

Policy E4-2.2: The City shall, through existing interlocal agreements with the City of Leesburg and the City of Groveland, pursue the extension of sanitary sewer collection and conveyance systems within the service area.

Policy E4-2.3: In accordance with the Interlocal Service Boundary Agreement, the City shall notify the County of requested sewer service within unincorporated Lake County.

Policy E4-2.4: Regulations for sewer allocation vested rights and the period of vesting will be defined in the City's Code of Ordinances.

Policy E4-2.5: Following a determination of concurrency for sanitary sewer, and to ensure reserved capacity and adequate sanitary sewer facilities are in place prior to the impact of development, the City shall require payment of applicable sewer impact fees upon development approval prior to application for building permits.

Policy E4-2.6: For proposed new development, the City shall require either connection to the central sewer system based on the following criteria, or the installation of septic tanks.

- New residential subdivisions and commercial developments shall be required to connect to the City's central sewer system when available. "Available" is defined by the City's Code consistent with §§ 381.0065 and 381.00655, Florida Statutes. If the central sewer system is not available, septic tanks shall be installed, and dry lines may be required if the City and a developer enter into a development agreement requiring dry lines. Mandatory connection shall thereafter be required when the City sewer system is available.
- Individual properties will be required to connect when the City sewer system is available.

Policy E4-2.7: The City shall, when feasible, extend the sanitary sewer collection and conveyance system to provide service within the downtown core. The first priority shall be existing non-residential uses; the second priority shall be existing residential uses.

Policy E4-2.8: The City shall, when feasible, extend the sanitary sewer collection and conveyance system to previously-constructed residential developments that have "dry-line" systems installed.

Policy E4-2.9: The City shall coordinate the utility and transportation planning efforts to take advantage of the most economical construction and maintenance costs possible when installing, repairing and/or replacing utility lines, roads and sewers.

Policy E4-2.10: The City, in cooperation with the City of Leesburg and the City of Groveland through existing interlocal agreements, shall pursue the implementation of a reclaimed water system as deemed feasible.

Policy E4-2.11: In accordance with the Interlocal agreements, the City shall coordinate sewer connections, capacity needs, and future extensions with the cities of Groveland and Leesburg.

Objective E4-3*: Maximize Existing Facilities. The City shall maximize the use of existing sanitary sewer facilities within its service area and shall promote compact efficient growth patterns.*

Policy E4-3.1: The City shall seek to maximize the use of existing sanitary sewer infrastructure facilities in order to minimize urban sprawl by requiring new development to pay the total costs for the placement of infrastructure necessary to service the development, thus making infill development more cost effective.

Policy E4-3.2: The City's Code of Ordinances shall incorporate means and methods to require connection to the City's sanitary sewer system for existing development, once it becomes available, for those properties that lie within the service area.

Policy E4-3.3: When connection to the sanitary sewer system is feasible, the City will prohibit new development within the service area from utilizing septic tanks and prohibit the use of package wastewater treatment plants where central sewer service is available.

Policy E4-3.4: Within the City's municipal boundaries, when existing central sanitary sewer service is determined to be unavailable to new development, the City may require the new development to extend the central sewer system at the developer's expense to service subject property, subject to the following conditions:

- The connection between the new development and the existing sanitary sewer line must be along a legally dedicated right-of-way or recorded easement; and
- The existing line to be connected to must have available, unreserved capacity.

Policy E4-3.5: Maintain adequate sanitary sewer impact fees and user rates to ensure adequate funding for expansion, repair and/or replacement of collection and transmission systems.

Policy E4-3.6: The City shall review sewer user rates annually or as otherwise needed to ensure that the fees charged cover the cost of supplying the service.

***Objective E4-4**: Septic Tanks. When feasible, the City shall mandate connection to the central sewer system, for any proposed new development and existing residences and non-residential establishments which are served by septic systems, and are deemed to be detrimental to the health, safety, and welfare of the general public.*

Policy E4-4.1: All septic tank systems shall be in compliance with Chapter 64E-6, Florida Administrative Code.

Policy E4-4.2: Development of new residential and non-residential projects on soils that are not suitable for septic tank systems will be required to provide central sanitary sewer systems.

Policy E4-4.3: The City shall coordinate with the Lake County Health Department to ensure that any development proposed in the City's service area will be required to connect to the City's sanitary sewer system when available at the times prescribed by the City's Code and pursuant to §§ 381.0065 and 381.00655, Florida Statutes. If the City's sanitary sewer system is not available, dry lines may be required if the City and a developer enter into a development agreement requiring dry lines.

Policy E4-4.4: The City will coordinate with the Lake County Health Department to require central sewer for developments in the City's service area that have soils unsuitable for septic tank systems.

Policy E4-4.5: The City will routinely coordinate information between the City and the Lake County Health Department and Lake County Building Department regarding failing septic tanks within the City and the City's service area.

Policy E4-4.6: The City shall monitor and keep a database of building permits requested for repair or replacement of existing septic tank and drain field systems within the City.

Goal E5: Provide a stormwater management system of appropriate capacity to protect public health, safety and welfare of the citizens of the City of Mascotte, and to meet current and future stormwater management demand, as well as decreasing inadequacies in the stormwater drainage system and water quality conditions.

***Objective E5-1**: Development Impacts. The City shall protect natural resources and the existing municipal stormwater network from the impacts of development and construction.*

Policy E5-1.1: The City will continue collection of a stormwater utility fee to provide funding for the maintenance and operations of stormwater facilities within the City of Mascotte. The City shall review/update the stormwater utility fee every three to five years to accommodate current inflation and increased construction costs.

Policy E5-1.2: The City shall review detailed calculations for new projects prepared by a registered professional engineer which show that retention and detention will be accomplished to meet the adopted level of service, and that there will be no negative impacts to downstream water quality or quantity.

Policy E5-1.3: The City shall review the characteristics and limitations of soil types for new projects with regard to percolation and infiltration.

Policy E5-1.4: The City shall review the impact proposed stormwater systems will have on adjacent native vegetation and/or wetlands.

Policy E5-1.5: The City shall require that erosion and sediment control practices be utilized to protect water bodies, wetlands, and watercourses from siltation during construction activities.

Policy E5-1.6: The City shall require adequate easements for stormwater system maintenance and conveyance.

Policy E5-1.7: New development and redevelopment shall be required to accommodate upland flow that presently discharges through the site.

Policy E5-1.8: Necessary measures shall be taken to protect and maintain the natural drainage features within the City limits of Mascotte.

Policy E5-1.9: The cumulative effects of drainage from small developments, as it affects the overall drainage system, will be addressed during the site plan approval phase.

Policy E5-1.10: Drainage from new developments shall not adversely impact the natural drainage features within the City.

Policy E5-1.11: All new developments with a density greater than one unit per acre shall provide curb and gutter drainage systems.

Objective E5-2*: Stormwater Master Plan. The City shall maintain a Stormwater Master Plan which establishes high water elevations, addresses existing deficiencies, and coordinates the construction of new and replacement facilities.*

Policy E5-2.1: The City shall maintain a detailed inventory and analysis of the existing publicly –owned and managed drainage facilities within its municipal boundaries in the City's Stormwater Master Plan.

Policy E5-2.2: The City shall update the Stormwater Master Plan every 5 years. Areas that have been annexed into or adjacent to the service area since the time of the last study shall also be included in this analysis.

Policy E5-2.3: The Stormwater Master Plan shall include review of stormwater quality discharged into surface water bodies and recommendations for needed improvements.

Policy E5-2.4: The Stormwater Master Plan shall establish priorities for stormwater system replacements, insuring correction of existing drainage facility deficiencies, and providing for future facility needs.

Policy E5-2.5: After completion, the City shall rely on the Stormwater Master Plan to prepare the City's annual budget for funding of stormwater facility replacement and deficiency upgrades.

Policy E5-2.6: The City shall utilize the Stormwater Master Plan for preparation of the 5-year Capital Improvement Plan to correct existing deficiencies and prepare for future stormwater demands.

Policy E5-2.7: New developments shall design stormwater management systems to meet the rules and criteria established by the City of Mascotte, the St. Johns River Water Management District, the Florida Department of Transportation, and Lake County (as applicable), and the East Central Florida Regional Planning Council.

Policy E5-2.8: The minimum acceptable Flood Protection Level of Service standards for the City of Mascotte shall be met in order to protect from flooding that would result from a 25-year, 24-hour storm event.

Objective E5-3*: Correcting Facility Deficiencies. The City shall ensure that surface water management system deficiencies are corrected and that natural drainage features are protected.*

Policy E5-3.1: The City shall coordinate with Lake County, Lake County Water Authority, and SJRWMD to encourage maintenance of conveyance and treatment features.

Policy E5-3.2: The City shall educate and inform citizens of their responsibility regarding maintenance and protection of stormwater collection systems.

***Objective E5-4**: Flood Control. The City shall achieve and maintain the following adopted stormwater management level of service standards that shall meet or exceed state and federal regulations for stormwater quality and quantity.*

Policy E5-4.1: All new development and redevelopment shall provide stormwater retention, infiltration, and/or detention systems.

Policy E5-4.2: The level of service (LOS) standards for the drainage system facilities developed within the City of Mascotte shall be as follows:

- Open Channels and culverts external to development 25 year
- Open Channels and culverts internal to development 10 year
- Cross Drains 25 year
- Storm Sewers 10 year
- Major Detention/ Retention Structures 25 year (SJRWMD)
- Minor Detention/ Retention Structures 25 year
- Retention w/ Percolation or Detention w/ filtration 25 year

Policy E5-4.3: Stormwater treatment shall be required to serve the development through a stormwater treatment system, which is site-specific. Regardless of the area served, the stormwater treatment system must provide a level of treatment, which meets the requirements of the Florida Administrative Code (F.A.C.), the City of Mascotte Code of Ordinances and the criteria of the St. Johns River Water Management District.

Policy E5-4.4: Pollutant retardant structures that separate oils and greases from runoff shall be designed for all new commercial and industrial type projects.

Policy E5-4.5: Whenever feasible, natural systems shall be used in lieu of structural alternatives.

Policy E5-4.6: At a minimum, the existing stormwater management systems and current levels of service shall be maintained.

***Objective E5-5**: Intergovernmental Coordination. The City of Mascotte shall educate citizens and coordinate with all applicable jurisdictions to address stormwater issues of mutual concern and to provide adequate levels of service.*

Policy E5-5.1: The Stormwater Master Plan shall be developed and updated in coordination with Lake County and other regulatory agencies, such as the, the St. Johns River Water Management District, and the Florida Department of Transportation.

Policy E5-5.2: The Stormwater Master Plan process will include public participation review of the plan by affected citizens and City Advisory Committees.

Policy E5-5.3: The City shall maintain a complaint monitoring system to log complaints and initiate work orders for corrective actions.

Policy E5-5.4: The City will support St. Johns River Water Management District's programs and stormwater regulations.

Policy E5-5.5: The City shall coordinate with the County, and the St. Johns River Water Management District to identify areas that require immediate flood protection and to investigate areas that lack water quality treatment.

***Objective E5-6**: Floodplain. The City shall restrict development within the 100-year floodplain to those uses, which will not adversely affect the capacity of the floodplain to store water.*

Policy E5-6.1: The City Code of Ordinances shall require compensating storage volumes for floodwater displaced by development. Compensating storage volumes shall be provided above the high water table elevation and below the elevation of the 100-year flood.

Policy E5-6.2: The City shall require the finished floor elevation of all structures shall be protected from flooding through provisions included in the Land Development Code.

Policy E5-6.3: Where feasible, the floodplain shall be reserved for conservation, open space and recreational uses to preserve the natural flow of runoff.

Policy E5-6.4: The City shall strive to protect and /or acquire land with natural depressions within its Urban Service area.

Goal E6: To provide, maintain, and protect, the surficial and Floridan aquifers to ensure that recharge of the natural groundwater aquifer occurs in a manner which maintains sufficient quality and quantity of the public water supply to meet current and future demands.

***Objective E6-1**: Natural Recharge Protection and Conservation. The City of Mascotte shall coordinate with other agencies and adopt measures in the Code of Ordinances that will ensure preservation of natural recharge to the City's groundwater resource and conservation of our potable water sources.*

Policy E6-1.1: Coordination. The City shall adhere to regulations and mapping established by St. Johns River Water Management District to protect areas of high recharge.

Policy E6-1.2: Coordination. The City shall continue to coordinate with Lake County, St. Johns River Water Management District, and state and federal agencies to achieve regional aquifer recharge protection objectives.

Policy E6-1.3: Coordination. The City shall coordinate with the SJRWMD on preparation of the regional Aquifer Protection Plan.

Policy E6-1.4: Education. The City shall educate residents on the benefits of water conservation and shall expand water conservation efforts.

Policy E6-1.5: Site Determination. For any application for development approval, the City shall require site specific determinations of whether a site lies within a prime aquifer recharge area as defined St. John's River Water Management District.

Policy E6-1.6: Wellfield Protection. The City shall protect wellfields by establishing a "primary protection zone" which shall include all land within a 500 foot radius of any existing wellhead and a "secondary protection zone" which includes all land within a 1,000 foot radius of any public wellhead. Development other than wellfield facilities or passive recreation shall be prohibited with the primary protection zone. With the secondary protection zone the following land use activities shall be prohibited: sanitary landfills, animal feedlots, wastewater treatment facilities, petroleum and pesticide storage facilities, incinerators, and all other activities that store, handle, or generate hazardous materials or wastes. Above-ground or below-ground pipes which store or transfer pollutants or other contaminants as well as open drainage cuts below the seasonal high water table shall also be prohibited within the secondary protection zone.

***Objective E6-2**: Best Management Practices. The City shall recognize the best management practice of promoting conservation of water.*

Policy E6-2.1: The City shall promote low or no water native landscaping, the use of solid waste compost, efficient irrigation systems, and the prohibition of exotic plant species, which will result in the conservation of water.

Policy E6-2.2: Stormwater. The City shall require that development within prime aquifer recharge areas maintain pre-development net retention to protect ground and surface water quality (Agricultural activities that use Best Management Practices adopted by US Natural Resources Conservation Service and the Florida Department of Environmental Protection are exempted).

Policy E6-2.3: The City shall require detention of stormwater runoff in compliance with state and water management requirements.

Policy E6-2.4: The City will maintain a leak detection and repair program for its potable water utilities.

Policy E6-2.5: The City shall pursue new techniques and innovative programs that will protect and conserve the City's potable water resources including, but not limited to, Low Impact Development (LID) principles, green design principles, or protection of vulnerable wetland systems that may be impacted by consumptive withdrawals.

Goal E7: To provide efficient and safe solid waste disposal facilities and collection services on a regular basis for all City residents and commercial establishments within the City of Mascotte to protect the environment and public health.

***Objective E7-1**: Solid Waste Disposal. The City shall coordinate the disposal of solid waste throughout the planning horizon in a safe and efficient manner.*

Policy E7-1.1: Level of Service. The City's minimum level of service for municipal solid waste shall be 6.00 pounds per person per day, which will be utilized to plan for future demand.

Policy E7-1.2: Franchise Administration. The City Manager shall be responsible for franchise administration and coordination of billing matters.

Policy E7-1.3: Standards. All solid waste disposal contracted or performed by the City of Mascotte shall be operated in a manner that complies with all applicable city, regional, state and federal solid waste disposal standards throughout the planning period.

Policy E7-1.4: Mandatory Collection. Solid waste collection shall be mandatory for all residential and non-residential land uses within the City corporate limits through the use of contracted haulers and/or the City.

Policy E7-1.5: Monitoring. Throughout the planning period the City shall continue to monitor complaints regarding residential and commercial solid waste collection by the contracted hauler to ensure that the most efficient, orderly, sanitary and environmentally sound service is being provided.

***Objective E7-2**: Collection. The City shall continue to provide for solid waste collection services to city residents and commercial establishments throughout the planning horizon.*

Policy E7-2.1: Alternative Evaluation. The City shall evaluate cost-effective collection alternatives, including the potential use of private or contracted haulers, to provide solid waste collection services to city residents and non-residential establishments throughout the planning horizon.

Policy E7-2.2: Equipment. The City, or the selected private provider, will provide adequate equipment to maintain a level of service standard for solid waste collection of 6.0 pounds per capita per day.

Policy E7-2.3: Collection Schedule. The City shall ensure the collection of refuse from residences at least twice each week.

***Objective E7-3**: Recycling. The City shall require a reduction in municipal solid waste final disposal in landfill facilities by maintaining and promoting its recycling program.*

Policy E7-3.1: Curbside Pick-up. The City shall continue to have a collection process in place for curbside pickup of newspapers, glass, plastics, tin and aluminum.

Policy E7-3.2: Yard Waste. The City shall continue to have a collection process in place for curbside pickup of yard waste.

Policy E7-3.3: Waste Stream Reduction. The City of Mascotte will promote the efforts of Lake County towards the reduction of the solid waste stream.

Policy E7-3.4: Coordinate with Lake County. The City shall endeavor to coordinate with Lake County with respect to Solid Waste Management and Waste Recycling Programs.

Policy E7-3.5: Hazardous Waste. The City shall coordinate with the County to monitor and control the disposal of hazardous wastes in accordance with State law.

Policy E7-3.6: Amnesty Day. The City will help the County promote and support the County's Amnesty Day Programs.

ELEMENT F – PUBLIC SCHOOL FACILITIES

Goal F1: Ensure and maintain a public school system that offers a high quality educational environment, provides accessibility for its students, and ensures adequate school capacity to accommodate enrollment demand in the City.

***Objective F1-1**: Level of Service. Level of Service (LOS) standards shall be adopted through the incorporation of public school facilities level of service standards for each Lake County School Board School Concurrency Service Area. The City shall coordinate with the District School Board of Lake County to address school facility deficiencies within the period covered by the Five-Year Schedule of Capital Improvements and the long-term planning period.*

Policy F1-1.1: The LOS is defined as school enrollment as a percentage of school student capacity based upon the Florida Inventory of School Houses (FISH). The LOS standard is the maximum level of school utilization that will be permitted in the Lake County School District.

Policy F1-1.2: The LOS shall be consistent with the Interlocal Agreement for the Coordination of Planning Activities and based upon permanent capacity as determined by the FISH, the following LOS standards are established for each School Concurrency Area (SCA):

- The LOS for all schools shall be set at 100% of FISH permanent capacity. In instances where the CORE (dining) capacity is greater than the FISH permanent capacity, the school capacity shall then be increased to that of the CORE (dining) capacity and the level of service maintained at 100% of the school capacity. In no instance shall the school capacity increase more than 125% due to additional CORE (dining) capacity.

Policy F1-1.3: The adopted LOS standard shall become applicable to the City no later than June 1, 2008.

Policy F1-1.4: Individual schools are discouraged from operating in excess of the established LOS. Moreover, the issuance of development orders and building permits shall be strictly conditioned upon the availability of school capacity and the maintenance of the adopted LOS.

Policy F1-1.5: The LOS standards will be used to determine whether sufficient school capacity exists to accommodate future development projects and evaluate the sufficiency of the Five-Year Schedule of Capital Improvements. The Five-year Schedule of Capital Improvements shall be reviewed, updated and adopted annually thus ensuring those projects necessary to address existing deficiencies, and to meet future needs based upon our adopted level of service standards, are adequately planned for. Furthermore, coordination with the Lake County School Board's Five Year District Facilities Work Plan, the plans of other local governments, and as necessary, updates to the Concurrency Service Area map is required to ensure that the adopted Level of Service Standards for Concurrency Service Areas will be achieved and maintained.

Policy F1-1.6: In accordance with the Interlocal Agreement between Lake County, Lake County School Board and Municipalities for School Facilities Planning and Siting, future amendments to the Concurrency Service Areas (CSA's) may be accomplished by the School Board only after review and comment by the County and other municipalities within Lake County as provided in the Interlocal Agreement. Amendments of the CSA's shall be established to maximize available school capacity, taking into account transportation costs, desegregation plans, diversity policies, and the extent to which development approvals have been issued by a local government based on the availability of school capacity in a CSA contiguous to the CSA in which the development approval was issued. Amendment to the CSA's and attendance zones shall be designed to make efficient use of new and existing public school facilities in accordance with the Level of Service Standards set forth in the Interlocal Agreement.

***Objective F1-2**: Evaluation of Development Proposals. Ensure that comprehensive plan amendments and other land use decisions are simultaneously evaluated with school capacity availability within the City.*

Policy F1-2.1: School Board findings and comments on the availability of adequate school capacity shall be considered when evaluating the decision to approve comprehensive plan amendments and other land use decisions as provided for in §163.3177(6)(a), F.S.

Policy F1-2.2: The School Board shall review potential new development student generation impacts and available school capacity. Where capacity will not be available to serve students from the property seeking development approval and proportionate share mitigation is not an option, the School Board shall not issue a favorable concurrency determination. The City may use lack of school capacity demonstrated by an unfavorable concurrency determination as a reason for denial.

***Objective F1-3**: Educational Facilities. Ensure that the planning and construction of educational facilities are coordinated so that the timing is proper, the selected location is compatible with the surrounding area, the construction is concurrent with necessary services and infrastructure and the proposal is consistent with the comprehensive plan.*

Policy F1-3.1: The City shall coordinate with the School Board so that proposed public school facility sites are consistent with the applicable land use designations and policies of the comprehensive plan. Pursuant to §1013.33, F.S., the City will consider each site plan as it relates to environmental concerns, health, safety and welfare, and effects on adjacent property. In addition, road capacity and traffic concerns will also be evaluated. The City will also continue to pursue the development of mutually acceptable guidelines for the selection of future school sites including, but not limited to:

- Acquisition of school sites which allow for future expansions to accommodate future enrollment and other facility needs deemed beneficial for joint-uses, as identified by the Lake County School Board and the City;
- Coordination of the location, phasing, and development of future school sites to ensure that site development occurs in conjunction with the provision of required infrastructure to serve be school facility;
- Preferences for urban and urbanizing areas; and
- Provide for allowances for rural sites as deemed necessary and appropriate under certain circumstances.

The City will coordinate its comprehensive plan and adopted Future Land Use Map with the Lake County School Board's future conditions/long-range public school facilities map.

Policy F1-3.2: The City shall coordinate with the School District to evaluate and located potential sites where the co-location of schools with other public facilities, such as parks, libraries, and community centers can be selected.

***Objective F1-4**: Land Use. Enhance community design through effective school facility design and siting standards and encourage the siting of school facilities so that they are compatible with the surrounding land use.*

Policy F1-4.1: The City shall closely coordinate with the School Board in order to provide consistency between the City's comprehensive plan and public school facilities programs, such as:

- Greater efficiency for the School Board and the City by locating schools to take advantage of existing and planned roads, water, sewer, parks and drainage systems;

- Improved student access and safety by coordinating the construction of new and expanded schools and sidewalk construction programs;
- The location and design of schools with parks, ball fields, libraries, and other community facilities to take advantage of shared use opportunities;
- The expansion and rehabilitation of existing schools to support neighborhoods.

Policy F1-4.2: Local governments and the school district shall coordinate emergency preparedness issues including, but not limited to, the use of school facilities as public shelters during emergencies.

Policy F1-4.3: Public schools shall provide bicycle and pedestrian access consistent with Florida Statutes. Bicycle access and trails to public schools should be incorporated in trail projects and programs that are currently scheduled by the City and County. Parking and sidewalks at public schools will be provided consistent with the comprehensive plan.

Policy F1-4.4: Schools shall be designed consistent with the comprehensive plan. Land uses in which schools will be an allowable use will be directed by the City's comprehensive plan and any subsequent zoning and land development codes must be consistent with the comprehensive plan.

Goal F2: It is the goal of the City to establish a process for the implementation of school concurrency by providing for capacity determination standards, applicability standards, and proportionate share mitigation.

***Objective F2-1:** Capacity Determination. Establish capacity determination standards.*

Policy F2-1.1: The School Board shall determine whether adequate school capacity exists for a proposed development based on LOS standards.

Policy F2-1.2: The School District shall conduct concurrency review that includes findings and recommendations of whether there is adequate school capacity to accommodate the proposed development for each type of school within the City consistent with the LOS standard. The School District shall issue a concurrency determination based on the findings and recommendations.

***Objective F2-2:** Availability Standards. Establish availability standards.*

Policy F2-2.1: The City shall not deny a subdivision plat or site plan for the failure to achieve and maintain the adopted level of service for the public school capacity where:

- Adequate school facilities will be in place or under construction within three (3) years after the issuance of the subdivision plat or site plan according to the School Board's five year Capital Improvement Plan at the time of approval;
- Adequate school facilities are available and the capacity impacts of development can be satisfied by utilizing available capacity in an adjacent Concurrency Service Area; or
- The developer executes a legally binding commitment to provide mitigation proportionate to the demand for public school facilities to be created by the actual development of the property subject to the final plat or site plan.

Policy F2-2.2: If the School District determines that adequate capacity will not be in place or under construction within three (3) years after the issuance of final subdivision or site plan approval according to the Lake County School Board's five year Capital Improvement Plan at the time of approval and mitigation is not an acceptable alternative, the School District shall issue a School concurrency Determination stating that capacity is not available. If the School District determines that adequate capacity does not exist, but mitigation, through proportionate share mitigation is an option, the development will remain active pending the conclusion of mitigation negotiations.

***Objective F2-3:** Proportionate Share Mitigation. Establish Proportionate Share Mitigation.*

Policy F2-3.1: The City will establish proportionate share mitigation alternatives which are financially feasible and will achieve and maintain the adopted LOS standard consistent with the adopted Lake County School Beard's financially feasible Capital Improvement Plan.

Policy F2-3.2: In the event that mitigation is an acceptable alternative to offset the impacts of a proposed development. where the adopted LOS standards would otherwise be exceeded, the following options listed below, for which the School District assumes operational responsibility through incorporation in the adopted School Board's financially feasible Capital Improvements Program and which will maintain the adopted LOS standards, shall include but not limited to:

- The donation, construction, or funding of school facilities created by the proposed development.
- The creation of mitigation banking based on the construction of a public school facility in exchange for the right to sell capacity credits.
- Establish proportionate share mitigation alternatives which are financially feasible and will achieve and maintain the adopted LOS standard consistent with the adopted Lake County School Board's financially feasible Capital Improvement Plan.

Policy F2-3.3: Proposed mitigation shall be directed toward a permanent capacity improvement identified in the School Board's financially feasible 5-Year Capital Improvement Program. Consideration may be given by the School Board to place an additional improvement required for mitigation on its Capital Improvement Program. The proposed mitigation must satisfy the demand created by the proposed development consistent with the adopted LOS standards or identified as an amendment to the adopted Capital Improvement Program. Portable classrooms will not be accepted as mitigation.

Policy F2-3.4: Mitigation shall be directed to projects on the school Board's financially feasible Capital Improvement Program that the School Board agrees will satisfy the demand created by that development approval, and shall be assured by a legally binding development agreement between the School Board, the relevant local government, and the applicant executed prior to the issuance of the subdivision plat, site plan, or functional equivalent. If the school agrees to the mitigation, the School Board must commit in the agreement to placing the improvement required for mitigation on its Capital Improvement Program. This development agreement shall include landowner's commitment to continuing renewal of the development agreement upon its expiration.

Policy F2-3.5: The applicant's total proportionate-share mitigation obligation to resolve a capacity deficiency shall be calculated by multiplying the number of new student stations required to serve the new development by the average cost per student station. The average cost per student station shall include school facility development costs and land costs. The applicant's proportionate-share mitigation obligation will be credited toward any other impact fee or exaction imposed by local ordinance for the same need on a dollar-for-dollar basis, at full-market value.

Policy F2-3.6: The process to determine proportionate share mitigation obligation shall be as follows:

Step 1: Determine the number of students to be generated by the development.

Number of Dwelling Units in the proposed development (by unit type)

MULTIPLIED BY

Student Generation Rate (by type of DU and by School Type provided by the school board)

EQUALS

Number Students Stations needed to serve the proposed development

Step 2: Comparing the available capacity to the number of student stations calculated in Step 1 to assess the need for mitigation.

Available Capacity within Service Area

MINUS

The Number of new Students Stations needed to accommodate the proposed development

EQUALS

The shortfall (negative number) or surplus (positive number) of capacity to serve the development

Step 3: Evaluating the available capacity in contiguous service areas.

If Step 2 results in a negative number, repeat that step for one or more contiguous service areas. If this step still results in a negative number, then proceed to step 4 to calculate the proportionate share mitigation.

Step 4: Calculating proportionate share mitigation.

Needed additional Student Stations from Step 3 (deficit)

MULTIPLIED BY

Average cost per Student Station

Policy F2-3.7: The student generation rates used to determine the impact of a particular development application on public schools shall be consistent with Lake County School Board and Florida Department of Education Standards. The student generation rates shall be reviewed and updated every two (2) years in accordance with professionally accepted methodologies.

ELEMENT G – OPEN SPACE AND RECREATION

Goal G1: Provision of Open Space, Parks, and Recreation. To provide adequate open space, parks, and recreation facilities to serve the needs of all Mascotte residents.

***Objective G1-1**: Level of Service Standards for Parks. To ensure adequate lands are provided for parks, the City shall utilize level of service standards for parks and other criteria specific to population, park size and location. For purposes of implementing this Objective, the City may utilize parklands under the jurisdiction of Lake County and public parks provided within residential developments.*

Policy G1-1.1: The level of service (LOS) standard for parks shall be as follows:

- Overall Parkland: four (4) acres per 1,000 residents. This standard includes both passive and active City parks and recreational facilities, and includes Community, Neighborhood, and Mini-parks.

Policy G1-1.2: The City of Mascotte shall utilize the following guidelines for determining the type and location for parklands:

- Community Park - A facility designed to serve the needs of more than one neighborhood. This facility type shall serve a minimum of 5,000 City residents and is located no greater than three (3) miles from those residents. The minimum size of any new community parks should be five (5) acres. Typical facilities found in community parks are designed to serve the entire family and typically include both passive and active recreation opportunities such as playground areas, recreation buildings, sports fields, paved multipurpose courts, picnic areas, open or free play areas, swimming pools, and landscaping.
- Neighborhood Park - A facility that serves an entire neighborhood or area with a minimum of 2,500 city residents and is located no greater than three-fourths (3/4) of a mile from those residents. The minimum size of a neighborhood park should be two (2) acres. Typical facilities provided include playground areas, recreation buildings, sports fields, paved multi-purpose courts, picnic areas, open or free play areas, and landscaping.
- Mini-Park – A small park serving a concentrated or limited population of 500 to 2,500 residents within a radius of up to six (6) blocks. A minimum size of one-quarter (1/4) acre for each stand-alone park is recommended. Mini-parks primarily offer passive recreation and typical facilities provided include playground areas, benches, open space, picnic tables, and landscaping.

Policy G1-1.3: The Land Development Code shall address standards for park development and improvements. Standards shall include buffering, landscaping, parking, and the amount of area available for facilities.

Policy G1-1.4: Those lands identified in this element as "Parks" shall perpetually be held in public ownership for recreation purposes.

Policy G1-1.5: The City shall include any declared land acquisition for recreational space within the Capital Improvement Schedule.

Policy G1-1.6: The City shall explore the potential for the construction of public boat launches (for non-motorized watercraft) on the shores of Dukes Lake, Sunset Lake, Little Bluff Lake and Big Bluff Lakes.

Policy G1-1.7: To maximize the use of existing and future sites, the City shall evaluate the feasibility of providing lights at active-based parks. However, no lights shall be installed if they would have a negative impact on a residential neighborhood.

***Objective G1-2**: Parks and Recreation Master Plan. The City shall prepare and maintain a Parks and Recreation Master Plan to identify future additions of activity-based recreational facilities to existing and future parks.*

Policy G1-2.1: The City shall prepare and maintain a Parks and Recreation Master Plan indicating the status of activity-based recreational facilities in the City.

Policy G1-2.2: The City shall use the State recommended standards for recreational facilities (fields and courts) as guidelines for the provision of facilities within existing and new City parks. These facilities are not required to be budgeted and constructed.

Policy G1-2.3: The Parks and Recreation Master Plan shall include areas for general open space (other than water bodies).

Policy G1-2.4: The Parks and Recreation Master Plan shall include an implementation plan indicating which activity-based recreational facilities will be added to existing and future parks in the City.

Policy G1-2.5: Consistent with the Capital Improvements Schedule process, the City of Mascotte shall budget for acquisition and actively negotiate to obtain property to ensure adequate park space in the future.

Policy G1-2.6: The City shall coordinate with the Florida Department of Environmental Protection to identify available grant funds for recreation and open space land acquisition and for development of recreation facilities.

Policy G1-2.7: The City shall actively pursue coordination with Lake County to ensure the County Future Land Use Map provides for areas to be reserved for neighborhood and community parks in the area of Mascotte.

Policy G1-2.8: Maximize the use of existing recreation space by promoting recreation activities and programs.

***Objective G1-3**: LOS Updates. The City shall review and, if necessary, update the Parks level of service standards every five years.*

Policy G1-3.1: The City Manager shall provide a written report every five (5) years justifying or proposing amendments to the level of service standards for parks and recreation facilities.

Policy G1-3.2: At the time the first written report is prepared, the City shall consider the need to adopt detailed level of service standards for specific activity-based recreational facilities (fields and courts).

Policy G1-3.3: Minimum land requirements needed to comply with the above LOS standard shall be monitored and evaluated at least once a year.

***Objective G1-4**: Park Maintenance. The City shall maintain and improve all City parks in a manner that is consistent with the recreation needs of the City residents, and maximizing the potential of the individual facilities.*

Policy G1-4.1: The City's parks and recreational facilities shall be renovated and/or upgraded as needed to provide improved recreational opportunities.

Policy G1-4.2: The City shall continue to maintain existing lights for evening recreation activities.

Policy G1-4.3: The City shall maintain an inventory of the location, size, condition and amenities available at each public park. This inventory shall be updated every year.

***Objective G1-5**: Accessibility. All recreation and open space areas shall be evaluated as to the accessibility to all Mascotte residents regardless of physical condition, age, or economic condition as outlined in the Uniform Federal Accessibility Standards.*

Policy G1-5.1: All city parks and open space shall be located so as to provide unobstructed access, when reasonably possible, through the following procedures:

- Existing facilities shall be evaluated and improved if necessary.
- Any new roadway or sidewalk construction required to access future sites shall be improved to Land Development Regulation engineering standards.

Policy G1-5.2: Any park undergoing renovation shall incorporate wheelchair and bicycle access.

Policy G1-5.3: Bicycle racks shall be provided at all recreation sites. The type and quantity of such facilities shall be determined by the City's Parks and Recreation Coordinator.

***Objective G1-6**: Private Parks and Recreation Facilities. The City shall coordinate the provision of open space by private interests.*

Policy G1-6.1: Park dedication requirements for residential development (see Policy A2-1.6), whether in the form of land or cash in-lieu of land, shall be addressed by the City at the time of the development review process.

Policy G1-6.2: Impact fees for recreation, parks and open space shall be evaluated every 5 (five) years to determine the appropriate fee to be charged to the development community.

***Objective G1-7**: Joint Use of Facilities. The City shall continue to coordinate with developers and other agencies to avoid duplication of recreation facilities, including provisions for joint use of private, as well as school board, recreation facilities to meet the recreation demands of the City's citizens.*

Policy G1-7.1: The City shall coordinate ways and means for private developers to provide public recreation facilities within their developments.

Policy G1-7.2: The City shall utilize the level of service review to recommend recreation improvements located within private development.

Policy G1-7.3: The City shall strengthen coordination with the Lake County School Board, to allow the use of school board facilities by the general public.

Policy G1-7.4: To avoid duplication of services, the City shall coordinate recreation planning activities with local and State governments.

Policy G1-7.5: The City shall review updates of the Countywide Parks and Recreation Master Plan, as they are done, and make the necessary updates to this element to achieve consistency.

Policy G1-7.6: The City shall pursue an interlocal agreement with Lake County for the purpose of using Lake County parks for organized recreation activities for Mascotte residents.

ELEMENT H – CONSERVATION

Goal H1: To protect, maintain, and conserve the natural resources of Mascotte for continued environmental quality and the well-being of all citizens.

***Objective H1-1**: Air Quality. The City shall maintain and enhance air quality.*

Policy H1-1.1: On an annual basis, the City shall obtain a revised list of any identified air pollution generators in and surrounding Mascotte from the Florida Department of Environmental Protection.

Policy H1-1.2: The City of Mascotte shall protect air quality by complying with or exceeding air standards established by the Florida Department of Environmental Protection.

Policy H1-1.3: Mascotte shall coordinate with Lake County and other local municipalities to prevent land uses adjacent to the City which would adversely impact air quality within Mascotte based on future land use compatibility.

Policy H1-1.4: The City of Mascotte shall require the highest air quality standards of industrial, commercial, and agricultural activities occurring in and around the City.

Policy H1-1.5: The City shall participate in air quality public information programs and shall encourage alternative forms of transportation.

***Objective H1-2**: Groundwater Resources. The City shall conserve, use best management techniques, and protect future and existing groundwater resources for potable water usage.*

Policy H1-2.1: The City shall require the installation of water conserving devices in all new construction, such as water conserving water closets, showerheads, faucets, etc. within its building codes.

Policy H1-2.2: To reduce groundwater consumption and runoff related to landscape irrigation, the City shall require new development to plant and/or preserve native drought-resistant vegetation for landscaping.

Policy H1-2.3: The City shall also promote the upgrade of existing commercial and residential landscaping to native drought-resistant species through education and pursuing matching grant programs.

Policy H1-2.4: The City shall support, assist and otherwise cooperate with, the Central Florida Water Initiative and the St. Johns River Water Management District in the implementation of the District's Water Shortage Plan.

Policy H1-2.5: The City shall notify the St. Johns River Water Management District of the presence of any abandoned free-flowing artesian wells identified within its jurisdiction and to record they existence.

Policy H1-2.6: The City, in cooperation with the City of Leesburg and the City of Groveland through existing interlocal agreements, shall pursue providing the implementation of a reclaimed water system as deemed feasible for non-potable water for irrigation.

Policy H1-2.7: The City shall not allow sink formations be to filled or excavated, and no debris placed adjacent to the sink, until the Florida Sink Hole Research Institute, or a surrogate state agency, has completed a site investigation to determine appropriate actions to protect property and groundwater quality.

Policy H1-2.8: The City shall prevent the storage of chemicals in the 100-year floodplain and in areas of high aquifer recharge.

Policy H1-2.9: The City shall participate in water conservation public information programs and shall encourage the use of water conserving plumbing fixtures and drought-resistant native vegetation for landscaping.

Policy H1-2.10: To ensure an adequate supply of potable water, the City shall evaluate the implementation of the Florida Water Star^{SM} program for all new construction.

Policy H1-2.11: The City shall continue participation with the planning and development of the Central Florida Water Initiative Regional Water Supply Plan.

Policy H1-2.12: During the development of alternative water supply projects, the City shall continue to be engaged with the Central Florida Water Initiative and shall evaluate each project to determine its benefit to the City's water resource needs.

Policy H1-2.13: Within 18 months of the approved and updated Regional Water Supply Plan, the City shall incorporate alternative water supply projects that have been identified and determined beneficial by the City into the comprehensive plan.

***Objective H1-3**: Wetlands. The City shall maintain and enforce Land Development Code that include performance criteria designed to protect and conserve wetlands from physical and hydrologic alterations as well as specifically direct incompatible land uses away from wetlands. These Policies within this Objective shall not apply to the Green Swamp Area of Critical State Concern.*

Policy H1-3.1: The City shall include in the LDR a requirement that any development that contains land meeting the definition of a wetland, as defined in Florida Statutes, shall conduct a wetland delineation. A delineation of the upland wetland boundary shall be established based upon an onsite field survey by a professional biologist or registered engineer provided by the applicant and coordinated with the St. Johns River Water Management District, the Florida Department of Environmental Protection, and/or the US Army Corps of Engineers. Furthermore, the development shall through a comprehensive planning process identify the types, values, functions, size, conditions, and specific locations of the wetlands on the site.

Policy H1-3.2: The City shall require that all new development obtain a stormwater management permit and, as necessary, other required permits from the St. Johns River Water Management District (SJRWMD), Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (ACOE).

Policy H1-3.3: The City will coordinate with SJRWMD, FDEP, and the ACOE regarding all stormwater management and other required permit applications.

Policy H1-3.4: The City shall require and enforce an undisturbed buffer, twenty-five (25) feet in width, adjacent to all wetlands and lakes. The area of wetlands in question shall include all contiguous wetlands located on the site and adjacent to the site. Buffers without native vegetation shall be revegetated with indigenous habitat to protect the quality of the adjacent isolated wetland, wetland system, lake, river or stream.

Policy H1-3.5: Wetlands shall be protected from physical or hydrologic alterations in order to maintain natural functions of the wetlands and lakes. No development shall be permitted in wetlands other than open space, restricted access to the property (where unavoidable, and kept to minimum width), bird sanctuary, natural preserve, or other similar land uses approved by the City pursuant to Land Development Code designed to carry out the intent of the Comprehensive Plan. The City shall continue to enforce existing regulations that address the following issues:

- Criteria and stipulations for protecting wetlands and managing the development review criteria;
- Protection of wetlands and fragile transition areas;

- Compensatory mitigation where proposed upland development presents a potential hazard to wetland functions.

The City's existing regulations require uses and activities in wetlands to comply with design and performance criteria which also regulate retention of natural drainage characteristics, minimization of alteration or modification, stormwater, and wetland buffers.

Policy H1-3.6: Transition areas shall be defined as the area separating wetland areas and their undisturbed buffers, from upland areas and in which development activities may be regulated to protect wetlands. The transition zone is an area having a direct groundwater or surface water influence. The transition area provides a buffer between wetlands and upland development or other land alteration activities. The purpose of the transition zone is to ensure the continuing function of respective wetland communities. The City shall retain the right to prohibit development within the wetland transition area. The boundary of a wetland transition area shall be established by field investigation. At a minimum the following uses shall be prohibited within the wetland transition areas:

- All industrial uses;
- Sanitary landfills;
- Wastewater treatment facilities;
- Incinerators;
- Animal feedlots;
- Petroleum or pesticide storage facilities;
- Above-ground or below-ground pipes (such as, gas/petroleum lines) for pollutants or contaminants;
- Any land use that stores, handles, or generates hazardous material or waste.

Policy H1-3.7: The City shall enforce performance criteria designed to protect and preserve wetlands, wetland transition areas and water management areas. The City shall enforce its stormwater management and wetland preservation regulations to provide for the dedication of conservation easements or reservations where the City finds that the dedication is reasonable in order to protect the value and function of a wetland or to further the objective of stormwater management plan.

Objective H1-4*: Wetlands within the Green Swamp Area of Critical State Concern. Within one year of the adoption of this Objective, the City shall further protect wetlands within the Green Swamp Area of Critical State Concern by enacting land development code regulations that implement the following Policies.*

Policy H1-4.1: *Upland Buffer.* No new development shall be located within fifty feet (50 ft.) of the furthest upland extend of any wetlands or water body.

Policy H1-4.2: *Wetland Impacts.* Wetland impacts shall only be allowed when there is no other alternative, such as when providing access to a parcel will result in unavoidable wetlands impacts and the denial of said impacts would result in a taking. Impacts shall be properly mitigated through the appropriate agency with jurisdiction.

Policy H1-4.3: *Unaltered State.* Wetlands and upland buffers shall be maintained in their natural and unaltered state. However, controlled burns, selective thinning, and ecosystem restoration and maintenance are permissible activities within the wetlands and upland buffers, provided they are performed in accordance with current Silvicultural Best Management Practices published by the Division of Forestry. Any isolated wetlands of less than one acre shall be exempt from these requirements.

Policy H1-4.4: *Wetland Delineations.* An application for development within the Green Swamp Area of Critical State Concern must include a wetlands delineation or statement that no wetlands are located on the parcel. The delineation or statement shall be prepared by a

professional biologist or registered engineer provided by the applicant and coordinated with the St. Johns River Water Management District, the Florida Department of Environmental Protection, and/or the US Army Corps of Engineers. Furthermore, an application for development shall identify the types, values, functions, size, conditions, and specific locations of the wetlands on the site.

***Objective H1-5**: Surface Water. The City shall protect surface water from all known and identifiable pollution sources.*

Policy H1-5.1: The City shall require new developments to use the best stormwater management techniques to control sediments, silt, and pollution carried by urban runoff before discharging into open waters

Policy H1-5.2: The design of stormwater management systems, including low impact development (LID) projects, shall meet the rules and criteria established by the City of Mascotte, the St. Johns River Water Management District, the Florida Department of Transportation (if applicable), and the East Central Florida Regional Planning Council.

Policy H1-5.3: On an annual basis, the City shall identify those components of the Mascotte drainage system that may be contributing to the overall degradation of surface water quality, and develop a priority listing for the mitigation of components.

Policy H1-5.4: The City shall not allow on-site sanitary sewer systems to directly discharge into any lake, nor shall a system use surface waters for back-up or overflow discharge.

Policy H1-5.5: The City shall pursue funding sources which are available from the State of Florida to acquire land along lakefront areas for recreation or conservation purposes

Policy H1-5.6: The City shall participate in the Florida Lake Watch Program with Lake County.

Policy H1-5.7: The City shall manage development along lake shoreline areas and lakefront littoral region through the establishment of both a Shoreline Protection and a Lakefront Littoral Zone. Both Zones shall be established as part of any new surface water management system, which consists of lakes and designated wetland areas. The Land Development Code shall provide appropriate development setbacks to preclude encroachment into these zones.

***Objective H1-6**: Floodplains. The City shall ensure long-range protection of the functionality of the City's floodplains. The Policies within this Objective shall not apply to the Green Swamp Area of Critical State Concern.*

Policy H1-6.1: Regulations for development within the floodplains and floodways will be maintained in the City's Land Development Code to prevent flooding.

Policy H1-6.2: On-site waste disposal systems shall be located outside of the floodplain to avoid impairment to them or contamination from them during flooding.

Policy H1-6.3: The City shall prohibit septic tanks, wastewater treatment plants, and spray fields within the 100 Year Flood Zone.

Policy H1-6.4: Where feasible, the floodplain shall be reserved, undisturbed, for conservation, open space and passive recreational uses to preserve the natural flow of runoff.

Policy H1-6.5: When development is proposed within the Flood Zone, to maintain reasonable use of and value of property, compensatory mitigation shall be required to maintain its natural flow regime.

Policy H1-6.6: The 100 Year Flood Zone shall be delineated within the Future Land Use Map Series, and its demarcations shall be determined by the most recent Flood Insurance Maps prepared by the Federal Emergency Management Agency.

***Objective H1-7**: Floodplain within the Green Swamp Area of Critical State Concern. Within one year from the adoption of this Objective, the City shall further protect the floodplain within the Green Swamp Area of Critical State Concern by enacting land development code regulations that implement the following Policies.*

Policy H1-7.1: Definition and Determination. Floodplain (or known as "flood hazard area") shall be defined as that area that lies within Zone A or Zone AE as delineated by the FEMA Flood Insurance Rate Map.

Policy H1-7.2: Development. For parcels that include land both outside the floodplain and within the floodplain, no development shall be allowed within the floodplain.

***Objective H1-8**: Wildlife and Vegetation Protection. The City shall appropriately use and protect wildlife and native wildlife habitat.*

Policy H1-8.1: The City shall work closely with the Florida Fish and Wildlife Conservation Commission (FFWCC) and private landowners to increase the public's knowledge of habitat protection and best management practices to protect endangered and threatened species, as well as species of special concern.

Policy H1-8.2: The City shall notify the Florida Game and Fresh Water Fish Commission to the presence of any roosting, nesting, or frequented habitat areas for endangered or threatened wildlife occurring within its jurisdiction.

Policy H1-8.3: The City shall coordinate during the development review process with the appropriate state and federal agencies for technical assistance in environmental issues regarding wildlife, and native wildlife habitat.

Policy H1-8.4: The City shall regulate the following activities in areas identified as being environmentally sensitive and in areas containing endangered and/or threatened wildlife, to ensure that such areas are preserved:

- The removal, excavation, or dredging of soil, sand, gravel, minerals, organic matter, or materials of any kind;
- The changing of existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics;
- The disturbance of the environmentally sensitive area's water level or water table by drainage, impoundment, or other means;
- The dumping or discharging of material, or the filling of an environmentally sensitive area with material;
- The placing of fill or the grading or removal of material that would alter topography;
- The destruction or removal of plant life that would alter the character of an environmentally sensitive area or wildlife habitat; and
- The conduct of an activity that results in a significant change of water temperature, a significant change of physical or chemical characteristics of environmentally sensitive area water sources, or the introduction of pollutants.

Policy H1-8.5: Native Vegetation Protection regulations shall mandate fair and equitable restoration and/or compensatory mitigative measures in order to compensate for loss of vegetation and to enhance stabilization of fragile slopes and/or lake shorelines

Policy H1-8.6: The City shall encourage new developments to protect existing native vegetation in common areas and buffer zone.

Policy H1-8.7: The City shall encourage additional planting of native plant species to enhance sparse vegetation in common areas and buffer zone.

Policy H1-8.8: The City shall cooperate with and assist Federal and State environmental and wildlife preservation agencies in their efforts to protect fish populations within the City's lakes and to promote environmental management activities, which enhance fish propagation through natural processes or by managed fish restocking.

Policy H1-8.9: The City shall coordinate with the Lake County Water Authority to control any aquatic weed, algae blooms, or other aquatic plant proliferation occurring within the City's lakes.

Policy H1-8.10: The City, through its Land Development Code will ensure the protection of areas of native vegetation, wildlife habitat, and endangered and threatened species.

Policy H1-8.11: Developers shall be required to identify wildlife habitat, and endangered and threatened species as part of the development review process, and shall be required to submit mitigation measures for review as part of the City's development review process.

Policy H1-8.12: Annually, the City shall maintain updated maps from FFWCC showing the locations of habitat for endangered and threatened species and species of special concern, and unique natural areas.

Policy H1-8.13: The City shall coordinate with Lake County to ensure the protection of environmentally sensitive areas that cross jurisdictional boundaries.

***Objective H1-9**: Soil Management. The City shall appropriately manage soils data and protect against soils erosion and uses inconsistent with soils.*

Policy H1-9.1: The City's Land Development Code shall continue to require that all site developments properly install and maintain erosion and sedimentation control devices, and that developers submit an erosion and sediment control plan before start of construction.

Policy H1-9.2: All disturbed soil areas will be permanently stabilized upon completion of development activities, in order to reduce soil erosion.

Policy H1-9.3: Whenever possible, native trees, shrubs and ground cover will be maintained on development sites to prevent soil erosion.

Policy H1-9.4: The City shall notify the local office of the U.S. Soil Conservation Service of any major soil erosion problems that may occur within the City's jurisdiction.

Policy H1-9.5: The City shall maintain soils records to be used in determining appropriate development usage.

Policy H1-9.6: The City shall not allow septic tanks in soils that do not adequately percolate.

***Objective H1-10**: Mining. The City shall regulate mining activities to prevent incompatible land uses from locating adjacent to each other.*

Policy H1-10.1: As no significant deposits of valuable minerals are present within the City of Mascotte, the City shall not encourage mining activities.

Policy H1-10.2: Major wind current patterns shall be considered for locating mining activities to ensure that dust particles and odors do not negatively impact adjacent land uses.

Policy H1-10.3: Mining, borrow pits, or any other resource extraction (including sand mining, peat mining, limerock mining, and phosphate mining) shall be prohibited in the Green Swamp Area of Critical State Concern.

***Objective H1-11**: Hazardous Waste. The City shall coordinate with the appropriate agencies to ensure that sources of hazardous waste are identified and monitored.*

Policy H1-11.1: The City shall continue to utilize the Lake County fire and emergency management services and the State Emergency Response Commission for Hazardous Materials, for its monitoring of hazardous waste generators within the City.

Policy H1-11.2: The City shall coordinate with Lake County to provide and promote citizen education programs and materials regarding hazardous waste and the proper method of disposal of common household hazardous waste materials.

Policy H1-11.3: The City shall reserve all rights and privileges to deny development of any commercial or industrial activity that is a threat to the quality of ground water or to the health and safety of City residents.

***Objective H1-12**: Historical, Archeological and Cultural. The City shall conserve significant sites and protect existing historical structures.*

Policy H1-12.1: The City shall coordinate with the State Division of Historic Resources in continuing to identify, protect, analyze, and explain the City's historical, archaeological, and cultural resources. Such efforts shall include determination of their worth and vulnerability, as well as determination of specific applicable preservation management policies.

Policy H1-12.2: The City shall prohibit development activities in or adjacent to historic archaeological sites that depreciate or eliminate their historical value.

Policy H1-12.3: The City shall promote and support local efforts, including those fostered by the Lake County Historical Society, to effectively pursue registration of historically significant sites under Federal and State certified historical master files.

ELEMENT I - INTERGOVERNMENTAL COORDINATION

Goal I1: Implement and promote stable working relationships with other governmental agencies to ensure efficient, effective, and thorough delivery of governmental services.

Objective I1-1*: Coordination of Plans. The City of Mascotte Comprehensive Plan shall strive to be consistent with the growth management plans of applicable agencies, such as the State Plan, the East Central Florida SRPP, Lake-Sumter Metropolitan Planning Organization's Long Range Transportation Plan, the Interlocal Service Boundary Agreement, and Lake County's Comprehensive Plan.*

Policy I1-1.1: Coordinate with affected governmental agencies on the review of development applications in a manner consistent with the Interlocal Service Boundary Agreement entered into with other cities and the County pursuant to Part II, Chapter 171, Florida Statutes.

Policy I1-1.2: Review the Comprehensive Plans of Lake County and other local municipalities to determine the impact of those adopted plans on the future growth and development of the City of Mascotte; such review shall occur on an annual basis, and whenever major Plan changes are made by those jurisdictions.

Policy I1-1.3: Participate in the ECFRPC's Strategic Regional Policy Plan review and update process as mandated by State Statute.

Policy I1-1.4: Continue coordination in planning efforts with Lake County, Groveland, and Leesburg through the sharing of relevant planning data and analysis, notification of development occurring within the City, and review of the impacts, including land use compatibility and impacts on City levels of service standards, of proposed development on adjacent local governments during the City's development review process.

Policy I1-1.5: Coordinate with the water resource protection efforts of the SJRWMD's Water Shortage Plan.

Policy I1-1.6: Gain standing and representation on Lake County Comprehensive Plan land use amendments, which would prove not to be consistent with the Future Land Use Element of the City's Comprehensive Plan.

Policy I1-1.7: Participate in the Long Range Transportation Plan process with the Lake-Sumter Metropolitan Planning Organization.

Policy I1-1.8: The City shall provide the following information and services to affected local governments and agencies:

- Provide planning data and analysis when requested,
- Review the actions of other local governments as to the impact of such actions on City levels of service, and
- Notification to affected local governments and governmental agencies of pending City actions regarding the provision of services and comprehensive plan amendments.

Policy I1-1.9: The City, as part of the development review process, shall provide the County and adjacent municipalities, the opportunity to comment on the siting of facilities with region wide significance.

Policy I1-1.10: Informal Mediation Process. The City shall coordinate with the County and adjacent municipalities to establish an informal mediation process for solving local intergovernmental coordination problems among local governments and other units of government providing services but not having regulatory authority over the use of land.

Policy I1-1.11: Formal Mediation Process. Where formal mediation fails to resolve local conflicts, the City shall determine if the issue warrants intervention of an unbiased mediation forum. Such mediation shall be granted to the East Central Florida Regional Planning Council, unless it is evident that the ECFRPC will not represent a fair or unbiased mediator. Upon such determination, the City shall coordinate with the Florida Department of Community Affairs to resolve intergovernmental conflict with another Regional Planning Council serving as the mediator.

Policy I1-1.12: Resolution through other means. Where Informal and Formal Mediation Processes fails to resolve local conflicts, The ECFRPC's conflict resolution process will be used for any disputes that cannot be otherwise resolved.

***Objective I1-2**: Joint Planning Areas. The City will continue to coordinate and if needed complete execution of agreements with adjacent local governments to improve land use compatibility between the respective governments.*

Policy I1-2.1: The City will continue to pursue Joint Planning opportunities with Lake County outlining the following:

- Establishment of a joint planning area for the purpose of annexation and identification of infrastructure service areas.
- The City would not exercise municipal jurisdiction over any lands unless they are annexed. The County Comprehensive Policy Plan would control those lands until annexed.
- Agreement to coordinate the provision of utilities to avoid duplication/overlap of facilities and services.
- Agreement to establish procedures for annexation, so that upon approval of an annexation ordinance, the City's comprehensive plan and Land Development Code shall apply. Concurrent with the annexation, the City may establish an initial zoning and rezone the annexed property consistent with the City comprehensive plan and the interlocal agreement.
- Agreement to apply, where possible, to City development standards.

Policy I1-2.2: The City shall coordinate with Lake County, other municipalities within Lake County, Sumter County, and the City of Center Hill, through interlocal agreements, if necessary, to improve the notification process regarding new development proposals within one mile of the common boundary that may impact the other jurisdiction in the provision of public facilities.

***Objective I1-3**: Informal Coordination. The City will appoint representatives to attend meetings regarding growth management, schools, parks, infrastructure and other related issues to coordinate on the City's behalf and maintain records of correspondence at such meetings.*

Policy I1-3.1: The City will strive to increase interaction with the ECFRPC, such as attendance at council meetings.

Policy I1-3.2: The City will attend and coordinate efforts through the Lake County Planner's Forum.

Policy I1-3.3: The City will coordinate land use amendment impacts with other local municipalities.

Policy I1-3.4: The City will coordinate with Lake County in an effort to compare the respective Land Use Code, and where there are inconsistent regulations, work towards eliminating such inconsistency, to the extent possible.

***Objective I1-4**: School Coordination. The City will participate in full cooperation and coordination with the Lake County School Board, as needed, to coordinate planning activities and maximize the use of available public funds.*

Policy I1-4.1: The City of Mascotte shall continue to coordinate with the School Board for Public School Facility Planning as required through the Interlocal Service Agreement.

Policy I1-4.2: The City shall continue to coordinate with the Lake County School Board to provide planning for adequate sites and infrastructure for future public education facilities within the City of Mascotte, through the following activities:

- The School Board shall provide facilities plans and population projections on an annual basis to ensure that consistency is maintained between the two.
- The School Board shall provide the City with any plans to site schools within the corporate limits or joint planning area.
- The City shall provide to the School Board all application for land use plan amendments that have the potential of increasing residential density and that may affect student enrollment, enrollment projections, or school facilities.
- The City shall allow a member of the School Board to sit on the Local Planning Agency and comment on proposals that have the potential to increase density.
- Take part in the Lake County Educational Concurrency Review Committee established by the County, School Board and municipalities that shall meet at least annually but more often if needed, and will hear reports and discuss issues concerning school concurrency.
- Take part in The Joint Staff School Concurrency Review Group, comprised of Staff of the County, Cities, and School Board, that shall meet at least quarterly to discuss issues concerning school concurrency. These issues shall include but not be limited to land use, school facilities planning, including such issues as population and the student projections, level of service, capacity, development trends, school needs, co-location and joint use opportunities, and ancillary infrastructure improvements needed to support schools and ensure safe student access. The School Board staff shall be responsible for making meeting arrangements.
- During pre-development program planning and school site selection activities, the City shall coordinate with the Lake County School Board to collocate schools with other public facilities, such as parks, libraries, and community centers to the maximum extent possible.

***Objective I1-5**: Annexation Coordination. The City will prioritize and manage annexations that are going to provide for the most effective implementation of public services and provide opportunities to prevent sprawling development patterns.*

Policy I1-5.1: All annexation policies shall be consistent with the Interlocal Service Boundary Agreement entered into with other cities and the County pursuant to Part II, Chapter 171, Florida Statutes.

***Objective I1-6**: Transportation Coordination. The City shall coordinate transportation issues with affected governmental agencies and jurisdictions to aid in meeting the objectives of other elements of this Plan.*

Policy I1-6.1: The City will coordinate transportation planning efforts with the Lake-Sumter Metropolitan Planning Organization.

Policy I1-6.2: On an annual basis, the City will notify the Lake-Sumter Metropolitan Planning Organization of population changes in the City to coordinate the voting opportunities of the Lake-Sumter Metropolitan Planning Organization's Elected Body board.

Policy I1-6.3: The City shall actively participate in the Florida Department of Transportation's 5-Year Transportation Improvement Program by submitting data that would impact S.R. 50 for inclusion in the program on an annual basis.

***Objective I1-7**: Infrastructure Coordination. The City shall coordinate infrastructure issues with affected governmental agencies and jurisdictions to aid in meeting the objectives of other elements of this Plan.*

Policy I1-7.1: Subject to the utilities policies within the Interlocal Service Boundary Agreement entered into with other cities and the County pursuant to Part II, Chapter 171, Florida Statutes, the City of Mascotte shall notify Lake County of any requests for utility service connections or extensions within unincorporated Lake County.

Policy I1-7.2: The City will request Lake County to notify the City of Mascotte of any requests for development of lands within the unincorporated portion of the City's utility service area.

Policy I1-7.3: Subject to the utilities policies within the Interlocal Service Boundary Agreement entered into with other cities and the County pursuant to Part II, Chapter 171, Florida Statutes, the City shall continue to coordinate with the City of Groveland, City of Leesburg, and Lake County regarding the utility service area boundaries.

Policy I1-7.4: Infrastructure Level of Service Coordination. The City shall exchange information with such entities on issues impacting concurrency and level of service throughout the process of developing the concurrency management system and especially in the determination of effective levels of service.

Policy I1-7.5: Subject to the fire hydrant policies within the Interlocal Service Boundary Agreement entered into with other cities and the County pursuant to Part II, Chapter 171, Florida Statutes, the City shall coordinate with Lake County on the installation of fire hydrants on City water mains that are located within unincorporated Lake County.

***Objective I1-8**: Conservation Coordination. The City shall coordinate conservation issues with affected governmental agencies and jurisdictions to aid in meeting the objectives of other elements of this Plan.*

Policy I1-8.1: Continue coordination with Federal, State, Regional, and private environmental agencies to ensure adequate technical support for all environmental issues in which the City requires technical expertise.

Policy I1-8.2: The City shall continue to participate and support programs and projects of State, Regional, and County agencies which seek to preserve environmentally sensitive lands, promote usable open space for all citizens, preserve habitats for endangered species, and protect groundwater supplies, potable water supplies, and surface water quality.

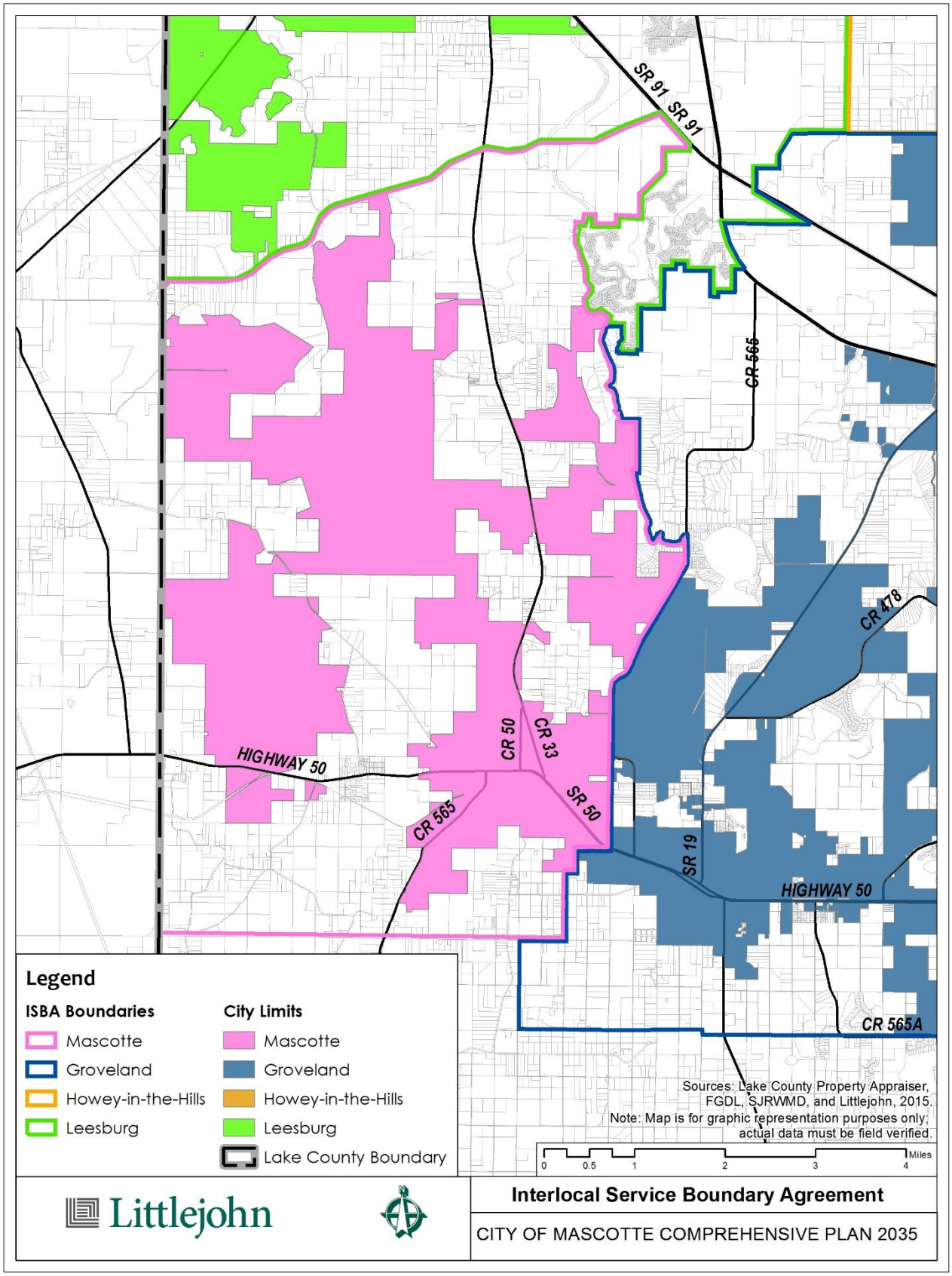
***Objective I1-9**: Parks and Recreation Coordination. The City shall coordinate parks and recreation issues with affected governmental agencies and jurisdictions to aid in meeting the objectives of other elements of this Plan.*

Policy I1-9.1: Coordinate with Lake County to recommend the provision of adequate land use acreage on the County and City Future Land Use Maps for regional, community and neighborhood park recreational space.

Policy I1-9.2: If opportunities arise, implement and maintain interlocal agreements with the Lake County School Board and Lake County for the provision and maintenance of shared recreational facilities within the City.

Policy I1-9.3: Coordinate greenways and trails with the County and State, and pursue funding mechanisms for implementation of these needed improvements.

MAP I - 1: INTERLOCAL SERVICE BOUNDARY AGREEMENT



MAPS ADOPTED PREVIOUSLY

APPENDIX H: CAPITAL FINANCING PLAN WORKSHEETS

APPENDIX I: WATER AND SEWER RATE SCHEDULE

APPENDIX J: MEETING MINUTES